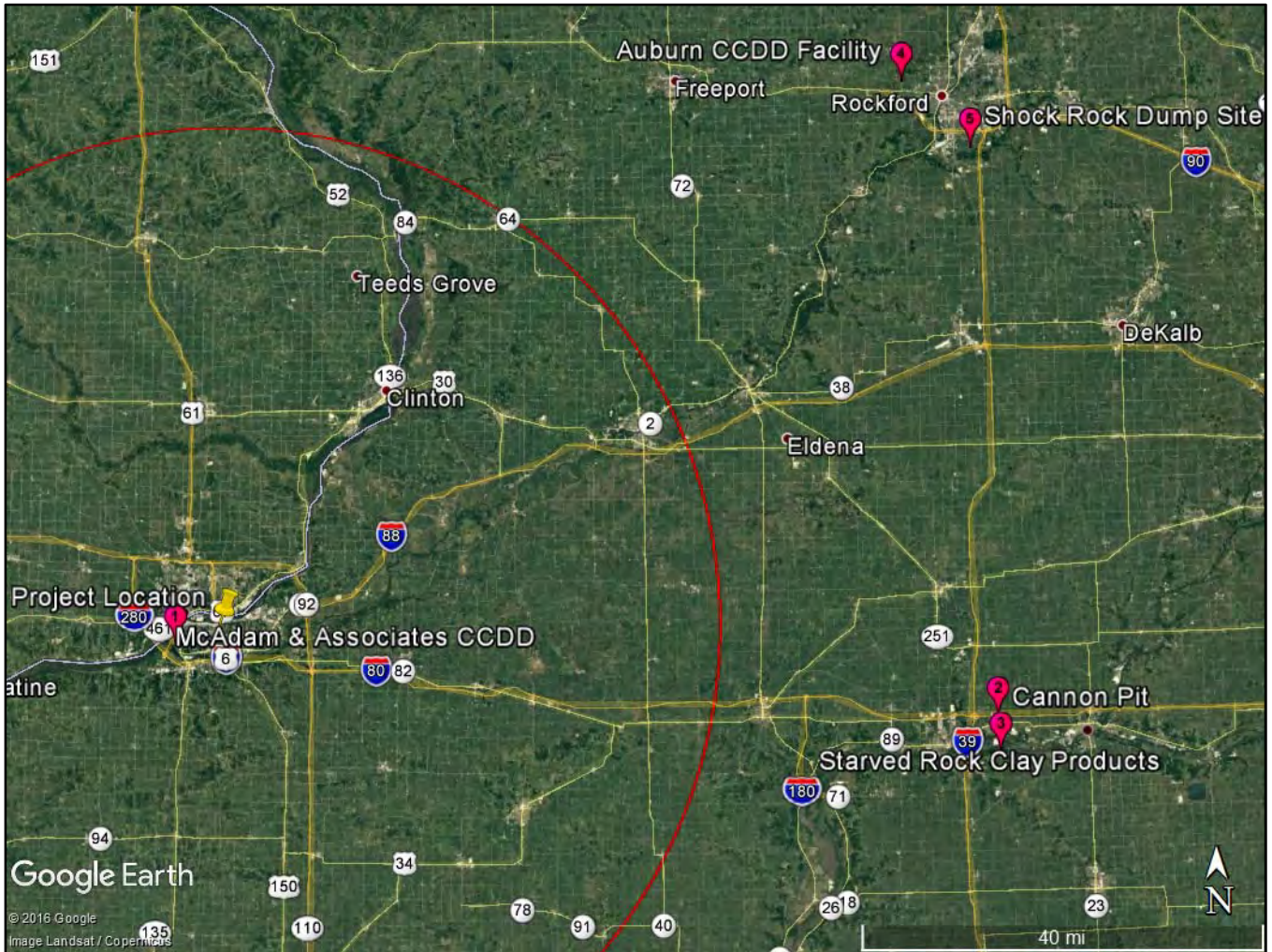


**CCDD/USFO Facilities within 100 miles of project location
 FAI 74 (Interstate 74), Contract No. 64E26
 Moline, Rock Island County, Illinois**



Red circle represents 50 mile radius from project location.

Site #	Name	CCDD or USFO	Physical Address	Approx. Distance From Project	Accepts		Confirmed Date and By
					Concrete/Asphalt	Soil	
1	McAdam & Associates CCDD	CCDD	240 34th Ave, Rock Island, IL 61201	5	Could not be confirmed		No response to phone calls
2	Cannon Pit	CCDD	I-80 & Rte 178, LaSalle, IL 61301	78	Yes	Yes	EAF 2/20/17
3	Starved Rock Clay Products	CCDD	2642 N Rte 178, Oglesby, IL 61348	79	Yes	Yes	EAF 2/20/17
4	Auburn CCDD Facility	CCDD	7419 Auburn St, Rockford, IL 61104	88	Yes	Yes	EAF 2/13/17
5	Shock Rock Dump Site	CCDD	3898 Blackhawk Road, Rockford, IL 61109	89	Yes	Yes	EAF 2/13/17

Note: Two facilities within 50 miles and one facility within 100 miles which do not accept soil are not included in map.



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 74 (I-74) Office Phone Number, if available: _____

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

I-74 from the Mississippi River to 29th Street (ISGS #1314V3-1)

City: Moline State: IL Zip Code: 61265

County: Rock Island Township: Moline

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

Latitude: 41.50676 Longitude: -90.5085

(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: 1618995006 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: 819 Depot Avenue

Street Address: 819 Depot Avenue

PO Box: _____

PO Box: _____

City: Dixon State: IL

City: Dixon State: IL

Zip Code: 61071 Phone: 815-284-5450

Zip Code: 61071 Phone: 815-284-5450

Contact: Heath Jordan

Contact: Heath Jordan

Email, if available: Heath.Jordan@illinois.gov

Email, if available: Heath.Jordan@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 74 (I-74)Latitude: 41.50676 Longitude: -90.5085Uncontaminated 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 1314V3-01-B12, -B14 through -B26, -B31, -B34, -B35, -B36, -B38 through -B41, and -B43 were sampled within the construction zone adjacent to ISGS #1314V3-1 (IDOT ROW). Refer to PSI Report for ISGS #1314V3-1 (IDOT ROW) including Table 4-4, and Figures 4-1, 4-7, and 4-8.

- 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 J120747-1, J120795-1, J120882-6, J120935-1, J121005-2, and J121261-1.

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

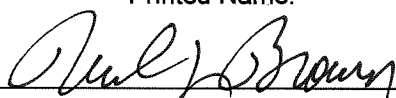
I, Neil J. Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental 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 StreetCity: Chicago State: IL Zip Code: 60603Phone: 312-578-9243

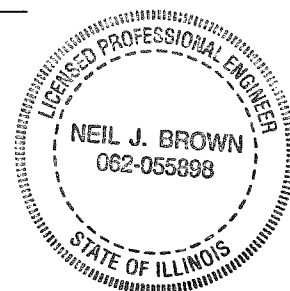
Neil J. Brown

Printed Name:


3/15/17

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Date:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01

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.

J = Estimated value.


U = Analyte was analyzed for but not detected.

Criteria Qualifiers and Shading

† = Concentration exceeds the most stringent MAC.

m = Concentration exceeds the MAC for an MSA.

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

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

 = Concentration exceeds applicable comparison criteria.

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B12		1314V3-01-B14		MACs			TACO		
SAMPLE	1314V3-01-B12 (0-6)	1314V3-01-B12 (6-11)	1314V3-01-B14 (0-6)	1314V3-01-B14 (6-12)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-11	0-6	6-12						
pH	8.8	8.1	8.2	7.8						
VOCs (mg/kg)										
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
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	ND U	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	ND U	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	ND U	ND U	ND U	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	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	3.3	5.4	3.3	3.1	11.3	13	--	13	61	--
Barium	53	74	69	220	1,500	--	--	5,500	14,000	--
Beryllium	0.36	0.46	0.59	0.72	22	--	--	160	410	--
Boron	1.4 J	1.6 J	1.2 J	1.8 J	40	--	--	16,000	41,000	--
Cadmium	0.18	0.25	0.078 J	0.17	5.2	--	--	78	200	--
Calcium	14,000	6,000	2,700	3,900	--	--	--	--	--	--
Chromium	8.3	11	16	13	21	--	--	230	690	--
Cobalt	5.9	7.6	8.3	6.1	20	--	--	4,700	12,000	--
Copper	7.3	11	16	11	2,900	--	--	2,900	8,200	--
Iron	9,500	13,000	16,000 tm	12,000	15,000	15,900	--	--	--	--
Lead	8.2	8.5	9.4	10	107	--	--	400	700	--
Magnesium	3,300	4,100	3,100	2,300	325,000	--	--	--	730,000	--
Manganese	450	510	250	220	630	636	--	1,600	4,100	--
Mercury	0.015 J	0.023	0.042	0.013 J	0.89	--	--	10	0.1	--
Nickel	14	20	22	14	100	--	--	1,600	4,100	--
Potassium	560	690	660	560	--	--	--	--	--	--
Selenium	0.41 J	0.5 J	0.81	1	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	230	120	160	56 J	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	13	19	24	23	550	--	--	550	1,400	--
Zinc	29	39	35	34	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.64	0.51	0.54	0.49 J	--	--	--	--	--	2
Boron	0.061 J	0.068 J	0.082 J	0.09 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	0.036	0.02 J	--	--	--	--	--	1
Iron	ND U	ND U	2.8	12 L	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.6 L	0.021 J	1.7 L	2.8 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	0.04	0.024 J	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.021 J	0.02 J	0.029 J	0.045 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	69 L	--	--	--	--	--	5
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.46 L	NA	0.38 L	0.4 L	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)					Comparison Criteria					
	1314V3-01-B15		1314V3-01-B16	1314V3-01-B17	1314V3-01-B18	MACs			TACO		
SAMPLE	1314V3-01-B15 (0-7)	1314V3-01-B15 (7-13)	1314V3-01-B16 (0-6)	1314V3-01-B17 (0-7)	1314V3-01-B18 (0-7)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-7	7-13	0-6	0-7	0-7						
pH	8.3	8.4	7.8	7.5	8.2						
VOCs (mg/kg)											
Acetone	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	ND U	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	ND U	ND U	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	ND U	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	ND U	ND U	ND U	0.0076 J	--	--	--	--	--	--
Pyrene	ND U	ND U	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	ND U	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	2.2	2.8	4.7	3.1	5.3	11.3	13	--	13	61	--
Barium	30	35	28	32	24	1,500	--	--	5,500	14,000	--
Beryllium	0.46	0.45	0.38	0.38	0.51	22	--	--	160	410	--
Boron	1.3 J	1.6 J	2.6	2.5 J	2.1 J	40	--	--	16,000	41,000	--
Cadmium	0.12	0.12	0.084 J	0.11	0.098 J	5.2	--	--	78	200	--
Calcium	60,000	26,000	110,000	77,000	64,000	--	--	--	--	--	--
Chromium	8.1	8.9	8.1	7.8	9.2	21	--	--	230	690	--
Cobalt	5.5	6	6	6.1	11	20	--	--	4,700	12,000	--
Copper	9.9	10	11	10	12	2,900	--	--	2,900	8,200	--
Iron	9,300	11,000	12,000	10,000	14,000	15,000	15,900	--	--	--	--
Lead	7.6	7.6	7.5	7	8.6	107	--	--	400	700	--
Magnesium	17,000	10,000	32,000	24,000	19,000	325,000	--	--	--	730,000	--
Manganese	270	230	310	270	290	630	636	--	1,600	4,100	--
Mercury	0.023	0.018	0.021 J	0.017 J	0.021	0.89	--	--	10	0.1	--
Nickel	13	15	14	16	19	100	--	--	1,600	4,100	--
Potassium	570	560	640	640	750	--	--	--	--	--	--
Selenium	0.69	0.57	0.28 J	0.35 J	0.57	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	65	55	98	85	82	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	11	13	13	11	14	550	--	--	550	1,400	--
Zinc	30	30	28	30	36	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.6	1.1	0.58	0.81	0.78	--	--	--	--	--	2
Boron	ND U	0.083 J	0.064 J	ND U	0.068 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.021 J	0.019 J	0.023 J	0.023 J	0.02 J	--	--	--	--	--	1
Iron	0.26 J	ND U	0.44	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	4 L	1.8 L	3.7 L	4.1 L	3.5 L	--	--	--	--	--	0.15
Nickel	0.037	0.023 J	0.046	0.037	0.029	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.024 J	0.04 J	0.034 J	ND U	0.046 J	--	--	--	--	--	5
SPLP Metals (mg/L)											
Cadmium	NA	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.052	0.2 L	0.039	0.057	ND U	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)					Comparison Criteria					
	1314V3-01-B19	1314V3-01-B20	1314V3-01-B21	1314V3-01-B22	1314V3-01-B23	MACs			TACO		
SAMPLE	1314V3-01-B19 (0-5)	1314V3-01-B20 (0-6)	1314V3-01-B21 (0-6)	1314V3-01-B22 (0-7)	1314V3-01-B23 (0-8)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	0-6	0-6	0-7	0-8						
pH	8.5	8.7	8.3	8.2	7.9						
VOCs (mg/kg)											
Acetone	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3-Dichlorobenzidine	ND U	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	0.0098 J	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.011 J	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	0.022 J	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	0.011 J	ND U	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.008 J	0.02 J	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	0.0087 J	ND U	ND U	ND U	--	--	--	--	--	--
Pyrene	0.01 J	0.018 J	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	ND U	0.37 J	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	3.2	4.2	4.6	2.6	2.4	11.3	13	--	13	61	--
Barium	59	71	45	78 J	66	1,500	--	--	5,500	14,000	--
Beryllium	0.45	0.47	0.47	0.4	0.43	22	--	--	160	410	--
Boron	1.8 J	3	3.9	2.1 J	3	40	--	--	16,000	41,000	--
Cadmium	0.14	0.35	0.19	0.22	0.14	5.2	--	--	78	200	--
Calcium	19,000	22,000	67,000	16,000 J	58,000	--	--	--	--	--	--
Chromium	9.7	13	12	8.3	11	21	--	--	230	690	--
Cobalt	6.9	5.5	7.8	6.3	5.7	20	--	--	4,700	12,000	--
Copper	10	12	13	8 J	10	2,900	--	--	2,900	8,200	--
Iron	11,000	13,000	13,000	9,400	10,000	15,000	15,900	--	--	--	--
Lead	10	22	11	7.4 J	8.3	107	--	--	400	700	--
Magnesium	9,500	11,000	21,000	9,800 J	18,000	325,000	--	--	--	730,000	--
Manganese	350	410	300	510 J	240	630	636	--	1,600	4,100	--
Mercury	0.027	0.015 J	0.029	0.057	0.012 J	0.89	--	--	10	0.1	--
Nickel	15	13	19	14	13	100	--	--	1,600	4,100	--
Potassium	600	1,100	850	680 J	690	--	--	--	--	--	--
Selenium	0.66	ND U	0.41 J	0.57 J	ND U	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	150	170	440	1,200 J	210	--	--	--	--	--	--
Thallium	ND U	0.93	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	15	18	18	11	15	550	--	--	550	1,400	--
Zinc	34	39	41	35 J	32	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.66	0.67	0.63	0.48 J	0.43 J	--	--	--	--	--	2
Boron	0.078 J	0.072 J	ND U	0.098 J	ND U	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1 L	0.17 L	0.96 L	0.28 L	1.5 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	0.055	ND U	0.016 J	--	--	--	--	--	0.1
Selenium	ND U	0.021 J	0.024 J	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.068 J	ND U	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Cadmium	NA	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.21 L	0.44 L	0.72 L	0.94 J L	ND U	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B24	1314V3-01-B25	1314V3-01-B26	1314V3-01-B31	MACs			TACO		
SAMPLE	1314V3-01-B24 (0-4.5)	1314V3-01-B25 (0-8.2)	1314V3-01-B26 (0-2)	1314V3-01-B31 (0-6)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-4.5	0-8.2	0-2	0-6						
pH	7.8	7.8	8.4	8.5						
VOCs (mg/kg)										
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	0.016 J	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	0.012 J	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	0.08	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.019 J	0.011 J	0.34	0.0096 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.02 J	0.0091 J	0.39 †	0.011 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.027 J	0.013 J	0.58	0.021 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	0.15	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.011 J	ND U	0.22	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	0.096 J	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.021 J	0.011 J	0.37	0.01 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	0.037	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.041	0.019 J	0.75	0.02 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	0.021 J	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.012 J	ND U	0.18	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.02 J	0.019 J	0.35	0.011 J	--	--	--	--	--	--
Pyrene	0.034 J	0.019 J	0.61	0.02 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	ND U	ND U	ND U	0.29 J	5	--	--	31	82	--
Arsenic	3.8	5.3	3.6	6.1	11.3	13	--	13	61	--
Barium	66	31	71	38	1,500	--	--	5,500	14,000	--
Beryllium	0.54	0.46	0.53	0.46	22	--	--	160	410	--
Boron	3.1	2.7 J	3.7	3.9	40	--	--	16,000	41,000	--
Cadmium	0.2	0.14	0.22	0.25	5.2	--	--	78	200	--
Calcium	20,000	33,000	21,000	40,000	--	--	--	--	--	--
Chromium	15	11	26 †	11	21	--	--	230	690	--
Cobalt	11	7.9	10	6.6	20	--	--	4,700	12,000	--
Copper	15	12	20	11	2,900	--	--	2,900	8,200	--
Iron	14,000	14,000	15,000	14,000	15,000	15,900	--	--	--	--
Lead	21	9.6	38	6.7	107	--	--	400	700	--
Magnesium	9,400	17,000	8,900	21,000	325,000	--	--	--	730,000	--
Manganese	340	370	430	440	630	636	--	1,600	4,100	--
Mercury	0.039	0.034	0.026	0.038	0.89	--	--	10	0.1	--
Nickel	20	17	27	14	100	--	--	1,600	4,100	--
Potassium	810	770	940	1,300	--	--	--	--	--	--
Selenium	ND U	ND U	0.29 J	ND U	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	130	110	380	1,000	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	0.94	2.6	--	--	6.3	160	--
Vanadium	24	17	25	17	550	--	--	550	1,400	--
Zinc	51	37	63	28	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.77	0.82	0.69	0.6	--	--	--	--	--	2
Boron	ND U	ND U	ND U	0.053 J	--	--	--	--	--	2
Cadmium	0.0024 J	0.002 J	ND U	0.0022 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	0.023 J	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	0.82 L	5.2 L	0.24 L	2.5 L	--	--	--	--	--	0.15
Nickel	0.01 J	0.034	ND U	0.028	--	--	--	--	--	0.1
Selenium	0.023 J	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.2 L	0.14	0.64 L	0.59 L	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)			Comparison Criteria					
	1314V3-01-B34			MACs			TACO		
BORING	1314V3-01-B34 (0-7)	1314V3-01-B34 (7-14)	1314V3-01-B34 (14-20)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil						
MATRIX	0-7	7-14	14-20						
DEPTH (feet)	8.6	8.6	8.6						
pH									
VOCs (mg/kg)									
Acetone	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.011 J	0.0068 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.05	0.036 J	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.055	0.03 J	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.079	0.043	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.028 J	0.02 J	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.033 J	0.015 J	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.056	0.039	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.0075 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.093	0.1	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.025 J	0.018 J	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.05	0.056	ND U	--	--	--	--	--	--
Pyrene	0.091	0.078	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	ND U	ND U	0.34 J	5	--	--	31	82	--
Arsenic	4.8	4	3 J	11.3	13	--	13	61	--
Barium	68	55	48	1,500	--	--	5,500	14,000	--
Beryllium	0.43	0.4	0.46	22	--	--	160	410	--
Boron	3.7	3.3	2.5 J	40	--	--	16,000	41,000	--
Cadmium	0.27	0.21	0.15	5.2	--	--	78	200	--
Calcium	26,000	61,000	30,000	--	--	--	--	--	--
Chromium	10	10	11	21	--	--	230	690	--
Cobalt	7.1	7	6.8 J	20	--	--	4,700	12,000	--
Copper	33	9.6	11	2,900	--	--	2,900	8,200	--
Iron	12,000	12,000	12,000	15,000	15,900	--	--	--	--
Lead	37	8.8	8.1	107	--	--	400	700	--
Magnesium	11,000	21,000	15,000	325,000	--	--	--	730,000	--
Manganese	330	360	250	630	636	--	1,600	4,100	--
Mercury	0.07	0.043	0.013 J	0.89	--	--	10	0.1	--
Nickel	16	15	17 J	100	--	--	1,600	4,100	--
Potassium	670	720	750 J	--	--	--	--	--	--
Selenium	0.68	0.3 J	0.41 J	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND UJ	4.4	--	--	390	1,000	--
Sodium	620	120	76	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	18	16	17	550	--	--	550	1,400	--
Zinc	60	32	32	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	1	0.53	0.74	--	--	--	--	--	2
Boron	0.082 J	0.065 J	0.051 J	--	--	--	--	--	2
Cadmium	0.0026 J	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	0.016 J	--	--	--	--	--	1
Iron	ND U	ND U	2.7	--	--	--	--	--	5
Lead	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	3.7 L	1.1 L	3.9 L	--	--	--	--	--	0.15
Nickel	0.025	0.01 J	0.033	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.069 J	ND U	0.023 J	--	--	--	--	--	5
SPLP Metals (mg/L)									
Cadmium	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.76 L	0.21 L	0.35 L	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B35				MACs			TACO		
BORING	1314V3-01-B35 (0-7)	1314V3-01-B35 (0-7)D	1314V3-01-B35 (7-14)	1314V3-01-B35 (14-20)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE										
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-7	0-7	7-14	14-20						
pH	8.6	8.5	8.2	8.6						
VOCs (mg/kg)										
Acetone	ND U	ND U	0.02	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	0.0092 J	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	0.013 J	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	0.0074 J	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.019 J	0.02 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.024 J	0.021 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.037 J	0.035 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.018 J	0.014 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	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.02 J	0.022 J	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.037 J	0.046	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.013 J	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.014 J	0.013 J	ND U	ND U	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	0.042	ND U	ND U	--	--	--	--	--	--
Pyrene	0.038	0.038 J	ND U	0.0085 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	4.1	4.3	1.1	3.1	11.3	13	--	13	61	--
Barium	62	61	57	20	1,500	--	--	5,500	14,000	--
Beryllium	0.37	0.45	0.33	0.42	22	--	--	160	410	--
Boron	2.3 J	3.2	1.6 J	2.2 J	40	--	--	16,000	41,000	--
Cadmium	0.12	0.17	0.16	0.081 J	5.2	--	--	78	200	--
Calcium	19,000	15,000	2,200	23,000	--	--	--	--	--	--
Chromium	12	12	8.5	10	21	--	--	230	690	--
Cobalt	7.6	8.4	4.4	6.2	20	--	--	4,700	12,000	--
Copper	11	11	7.6	11	2,900	--	--	2,900	8,200	--
Iron	11,000	10,000	7,600	11,000	15,000	15,900	--	--	--	--
Lead	9.7	17	7	7.6	107	--	--	400	700	--
Magnesium	11,000	8,500	1,400	11,000	325,000	--	--	--	730,000	--
Manganese	300	180	88	230	630	636	--	1,600	4,100	--
Mercury	0.047	0.035	0.01 J	0.013 J	0.89	--	--	10	0.1	--
Nickel	16	17	11	13	100	--	--	1,600	4,100	--
Potassium	530	660	440	640	--	--	--	--	--	--
Selenium	0.3 J	0.32 J	0.38 J	0.36 J	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	190	160	120	75	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	21	19	13	15	550	--	--	550	1,400	--
Zinc	37	64	34	31	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	1.2	0.92	0.77	0.51	--	--	--	--	--	2
Boron	0.097 J	0.085 J	0.055 J	0.059 J	--	--	--	--	--	2
Cadmium	0.0027 J	0.0029 J	0.0026 J	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.048	0.035	0.02 J	0.023 J	--	--	--	--	--	1
Iron	ND U	0.24 J	ND U	0.93	--	--	--	--	--	5
Lead	0.0093 L	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	5.9 L	5.5 L	4.7 L	3.6 L	--	--	--	--	--	0.15
Nickel	0.046	0.04	0.021 J	0.054	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	--	--	--	--	--	5
Lead	0.031 L	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.21 L	0.36 L	0.31 L	0.42 L	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B36				MACs			TACO		
BORING	1314V3-01-B36 (0-8)	1314V3-01-B36 (8-16)	1314V3-01-B36 (16-24)	1314V3-01-B36 (24-28)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil						
MATRIX	0-8	8-16	16-24	24-28						
DEPTH (feet)	8.4	8.3	8.5	8.2						
pH										
VOCs (mg/kg)										
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
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	0.0086 J	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.0052 J	0.029 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.029 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.0092 J	0.036 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	0.013 J	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.014 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	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	0.026 J	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.0087 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	0.058	ND U	ND U	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	ND U	0.017 J	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	0.041	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	0.054	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.6 J	0.34 J	0.3 J	ND U	5	--	--	31	82	--
Arsenic	4.5	5.3	3.4	3.3	11.3	13	--	13	61	--
Barium	31	48	52	25	1,500	--	--	5,500	14,000	--
Beryllium	0.52	0.5	0.39	0.23	22	--	--	160	410	--
Boron	0.8 J	3.2	2.8	3.2	40	--	--	16,000	41,000	--
Cadmium	0.18	0.31	0.24	0.15	5.2	--	--	78	200	--
Calcium	4,000	21,000	38,000	47,000	--	--	--	--	--	--
Chromium	12	13	9.7	5.5	21	--	--	230	690	--
Cobalt	5.6	6.5	7.4	2.9	20	--	--	4,700	12,000	--
Copper	13	13	11	6.7	2,900	--	--	2,900	8,200	--
Iron	15,000	16,000 †m	12,000	7,400	15,000	15,900	--	--	--	--
Lead	7.9	8.7	6.5	4.3	107	--	--	400	700	--
Magnesium	2,600	12,000	18,000	25,000	325,000	--	--	--	730,000	--
Manganese	140	600	370	250	630	636	--	1,600	4,100	--
Mercury	ND U	ND U	ND U	ND U	0.89	--	--	10	0.1	--
Nickel	12	14	15	7.2	100	--	--	1,600	4,100	--
Potassium	880	1,200	1,000	650	--	--	--	--	--	--
Selenium	0.27 J	ND U	ND U	ND U	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	370	92	95	200	--	--	--	--	--	--
Thallium	0.54	1	0.68	0.42 J	2.6	--	--	6.3	160	--
Vanadium	15	24	14	9.5	550	--	--	550	1,400	--
Zinc	30	32	25	18	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.69	1.1	0.55	0.54	--	--	--	--	--	2
Boron	0.05 J	0.093 J	ND U	ND U	--	--	--	--	--	2
Cadmium	0.0036 J	0.0038 J	0.0029 J	0.003 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.037	0.027	0.015 J	0.015 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	0.011 L	ND U	ND U	--	--	--	--	--	0.0075
Manganese	6.7 L	10 L	3.4 L	3.4 L	--	--	--	--	--	0.15
Nickel	0.039	0.03	0.022 J	0.023 J	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.025 J	0.13 J	ND U	0.066 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	0.069 L	NA	NA	--	--	--	--	--	0.0075
Manganese	0.73 L	0.59 L	0.57 L	0.13	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (ROW)					Comparison Criteria					
	1314V3-01-B38	1314V3-01-B39	1314V3-01-B40	1314V3-01-B41	1314V3-01-B43	MACs			TACO		
SAMPLE	1314V3-01-B38 (0-4)	1314V3-01-B39 (0-4)	1314V3-01-B40 (0-2)	1314V3-01-B41 (0-2)	1314V3-01-B43 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-4	0-4	0-2	0-2	0-2						
pH	8.7	8.2	8.8	8.7	8.8						
VOCs (mg/kg)											
Acetone	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3-Dichlorobenzidine	ND U	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND UJ	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND UJ	ND U	ND U	ND U	0.0099 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.021 J	ND U	0.018 J	0.019 J	0.056	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.024 J	ND U	ND U	ND U	0.072	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.033 J	ND U	0.025 J	0.031 J	0.11	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.022 J	ND U	ND U	0.015 J	0.091 J	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	0.033 J	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND UJ	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.021 J	ND U	0.019 J	0.022 J	0.074	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND UJ	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND UJ	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.028 J	ND U	0.024 J	0.04	0.11	3,100	--	--	3,100	82,000	--
Fluorene	ND UJ	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.021 J	ND U	0.012 J	ND U	0.039	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.0098 J	ND U	ND U	0.013 J	0.064	--	--	--	--	--	--
Pyrene	0.034 J	ND U	0.026 J	0.032 J	0.12 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	ND U	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	4.5	5.5	5	5.1	5.7	11.3	13	--	13	61	--
Barium	80	82	67	73	85	1,500	--	--	5,500	14,000	--
Beryllium	0.44	0.45	0.41	0.47	0.49	22	--	--	160	410	--
Boron	2.7	1.8 J	2.3 J	2.6 J	2.1 J	40	--	--	16,000	41,000	--
Cadmium	0.17	0.2	0.19	0.22	0.3	5.2	--	--	78	200	--
Calcium	21,000	2,300	22,000	19,000	14,000	--	--	--	--	--	--
Chromium	12	13	11	13	13	21	--	--	230	690	--
Cobalt	6.5	9.8	8.1	8	8.1	20	--	--	4,700	12,000	--
Copper	12	14	12	14	15	2,900	--	--	2,900	8,200	--
Iron	12,000	14,000	13,000	13,000	14,000	15,000	15,900	--	--	--	--
Lead	14	12	13	32	91	107	--	--	400	700	--
Magnesium	11,000	1,800	12,000	11,000	5,900	325,000	--	--	--	730,000	--
Manganese	250	440	390	370	480	630	636	--	1,600	4,100	--
Mercury	0.027	0.024	0.03	0.035	0.031	0.89	--	--	10	0.1	--
Nickel	16	25	19	19	20	100	--	--	1,600	4,100	--
Potassium	630	590	710	680	680	--	--	--	--	--	--
Selenium	0.26 J	ND U	0.51 J	0.74	0.6	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	1,500	750	720	360	370	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	22	25	19	20	20	550	--	--	550	1,400	--
Zinc	43	57	46	57	81	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.85	0.41 J	1.1	1.2	0.97	--	--	--	--	--	2
Boron	ND U	ND U	0.061 J	0.082 J	0.12 J	--	--	--	--	--	2
Cadmium	0.0025 J	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	0.009 L	--	--	--	--	--	0.0075
Manganese	0.46 L	0.018 J	0.41 L	0.31 L	0.21 L	--	--	--	--	--	0.15
Nickel	0.011 J	ND U	0.012 J	0.011 J	0.01 J	--	--	--	--	--	0.1
Selenium	0.021 J	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	ND U	0.024 J	0.048 J	0.11 J	--	--	--	--	--	5
SPLP Metals (mg/L)											
Cadmium	NA	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	NA	0.14 L	--	--	--	--	--	0.0075
Manganese	1.6 L	NA	1.2 L	0.89 L	0.69 L	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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2417 Bond Street
University Park, IL 60484
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TestAmerica Job ID: 500-120747-1
Client Project/Site: IDOT - I-74 - WO 046

For:
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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	16
Client Sample Results	17
Definitions	85
QC Association	86
Surrogate Summary	96
QC Sample Results	98
Chronicle	114
Certification Summary	128
Chain of Custody	129
Receipt Checklists	131

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Job ID: 500-120747-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120747-1

Comments

No additional comments.

Receipt

The samples were received on 11/30/2016 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0° C and 3.9° C.

Receipt Exceptions

All bottles for laboratory sample -16 have an ID of 1314V3-01-B13 (0-5), Chain of custody has 1314V3-01-B11 (0-5). Based on 12/2 communication, the lab logged in per bottles.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The following matrix spike duplicate (MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. 1314V3-01-B43 (0-2) (500-120747-1)

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

Metals

Method(s) 6020A: The internal standard (Tb) was used to report the elements Lead, Antimony, and Thallium in batch 500-363685. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B43 (0-2)

Lab Sample ID: 500-120747-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.064		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0099	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.11		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.12	F1	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.056		0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.074		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.11		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.033	J	0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.072		0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.039		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.091	F1	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.7		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	85		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.1	J	2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.1		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	91		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5900		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	480		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	680		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.60		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	81		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.97		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.0090		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.11	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.14		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.69		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

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- 3
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- 14

Client Sample ID: 1314V3-01-B41 (0-2)

Lab Sample ID: 500-120747-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.013	J	0.040	0.0056	mg/Kg	1	☼	☼	8270D	Total/NA
Fluoranthene	0.040		0.040	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Pyrene	0.032	J	0.040	0.0080	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]anthracene	0.019	J	0.040	0.0054	mg/Kg	1	☼	☼	8270D	Total/NA
Chrysene	0.022	J	0.040	0.011	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.031	J	0.040	0.0087	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	5.1		0.57	0.27	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	73		0.57	0.11	mg/Kg	1	☼	☼	6010B	Total/NA
Beryllium	0.47		0.23	0.050	mg/Kg	1	☼	☼	6010B	Total/NA
Boron	2.6	J	2.9	0.40	mg/Kg	1	☼	☼	6010B	Total/NA
Cadmium	0.22		0.11	0.033	mg/Kg	1	☼	☼	6010B	Total/NA
Calcium	19000		11	3.7	mg/Kg	1	☼	☼	6010B	Total/NA
Chromium	13	B	0.57	0.099	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B41 (0-2) (Continued)

Lab Sample ID: 500-120747-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	8.0		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	32		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	680		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.74		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	360		57	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	1.2		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.31		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.048	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.89		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.035		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B40 (0-2)

Lab Sample ID: 500-120747-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.024	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.026	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.018	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	0.025	J	0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.0		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	67		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	22000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.56	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.1		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	710		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.51	J	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	720		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	1.1		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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B40 (0-2) (Continued)

Lab Sample ID: 500-120747-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.41		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.2		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.019	0.0098	mg/Kg	1	✳	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B19 (0-5)

Lab Sample ID: 500-120747-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.0080	J	0.036	0.0067	mg/Kg	1	✳	8270D	Total/NA
Pyrene	0.010	J	0.036	0.0072	mg/Kg	1	✳	8270D	Total/NA
Arsenic	3.2		0.54	0.25	mg/Kg	1	✳	6010B	Total/NA
Barium	59		0.54	0.099	mg/Kg	1	✳	6010B	Total/NA
Beryllium	0.45		0.22	0.047	mg/Kg	1	✳	6010B	Total/NA
Boron	1.8	J	2.7	0.38	mg/Kg	1	✳	6010B	Total/NA
Cadmium	0.14		0.11	0.031	mg/Kg	1	✳	6010B	Total/NA
Calcium	19000		11	3.5	mg/Kg	1	✳	6010B	Total/NA
Chromium	9.7	B	0.54	0.093	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B19 (0-5) (Continued)

Lab Sample ID: 500-120747-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	6.9		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.27	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9500		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	600		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.66		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	150		54	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.27	0.079	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.078	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.068	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.017	0.0088	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B18 (0-7)

Lab Sample ID: 500-120747-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0076	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	24		0.54	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.51		0.21	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	2.1	J	2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.098	J	0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	64000		110	35	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.2	B	0.54	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	8.6		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	82		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.78		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.029		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.046	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.021		0.017	0.0090	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B18 (0-7) (Continued)

Lab Sample ID: 500-120747-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B17 (0-7)

Lab Sample ID: 500-120747-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.54	0.099	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		0.22	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	77000		110	35	mg/Kg	10	☼	6010B	Total/NA
Chromium	7.8	B	0.54	0.093	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	7.0		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	640		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	85		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.27	0.079	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.81		0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	4.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.057		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.019	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B16 (0-6)

Lab Sample ID: 500-120747-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.7		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	28		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.084	J	0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000		110	34	mg/Kg	10	☼	6010B	Total/NA
Chromium	8.1	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.0		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.5		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	32000		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	640		26	4.3	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B16 (0-6) (Continued)

Lab Sample ID: 500-120747-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.28	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	98		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.44		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	3.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.034	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.039		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B15 (0-7)

Lab Sample ID: 500-120747-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.54	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.22	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	1.3	J	2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	60000		110	35	mg/Kg	10	☼	6010B	Total/NA
Chromium	8.1	B	0.54	0.094	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.27	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	9.9		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	9300		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	7.6		0.27	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	570		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.69		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	65		54	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.27	0.080	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.26	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	4.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.052		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.017	0.0089	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B15 (7-13)

Lab Sample ID: 500-120747-11

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (7-13) (Continued)

Lab Sample ID: 500-120747-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.8		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.54	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	1.6	J	2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000		11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.9	B	0.54	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.0		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.6		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	10000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	560		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57		0.54	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	55		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	1.1		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.040	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B14 (0-6)

Lab Sample ID: 500-120747-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	69		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	1.2	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.078	J	0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	2700		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	16	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.3		0.28	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	9.4		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3100		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	22		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	660		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.81		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.28	0.081	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (0-6) (Continued)

Lab Sample ID: 500-120747-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	35		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Iron	2.8		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.029	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.38		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.042		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B14 (6-12)

Lab Sample ID: 500-120747-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	220		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.72		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	3900		12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.30	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		12	4.7	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2300		6.0	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	560		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.0		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	56	J	60	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.30	0.088	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.090	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	12		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.045	J B	0.50	0.020	mg/L	1		6010B	TCLP
Iron	69		0.20	0.20	mg/L	1		6010B	SPLP East
Manganese	0.40		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B12 (0-6)

Lab Sample ID: 500-120747-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		0.55	0.25	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (0-6) (Continued)

Lab Sample ID: 500-120747-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	53		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.36		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	1.4	J	2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000		11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.3	B	0.55	0.094	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.9		0.27	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	7.3		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	9500		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	8.2		0.27	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3300		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	450		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	560		27	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		55	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.27	0.080	mg/Kg	1	☼	6010B	Total/NA
Zinc	29		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.60		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.021	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.46		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B12 (6-11)

Lab Sample ID: 500-120747-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.4		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	74		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	1.6	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	6000		12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.6		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	8.5		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4100		5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	510		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	690		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.50	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		58	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (6-11) (Continued)

Lab Sample ID: 500-120747-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.020	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.023		0.018	0.0094	mg/Kg	1	✳	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B22 (0-7)

Lab Sample ID: 500-120747-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.6		0.56	0.26	mg/Kg	1	✳	6010B	Total/NA
Barium	78	F1	0.56	0.10	mg/Kg	1	✳	6010B	Total/NA
Beryllium	0.40		0.22	0.048	mg/Kg	1	✳	6010B	Total/NA
Boron	2.1	J F1	2.8	0.39	mg/Kg	1	✳	6010B	Total/NA
Cadmium	0.22		0.11	0.032	mg/Kg	1	✳	6010B	Total/NA
Calcium	16000		11	3.6	mg/Kg	1	✳	6010B	Total/NA
Chromium	8.3	B	0.56	0.096	mg/Kg	1	✳	6010B	Total/NA
Cobalt	6.3		0.28	0.063	mg/Kg	1	✳	6010B	Total/NA
Copper	8.0	F1	0.56	0.12	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B22 (0-7) (Continued)

Lab Sample ID: 500-120747-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	9400		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	7.4	F1 F2	0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9800		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	510		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	680	F1	28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57	F1	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200	F1 F2	56	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	35	F1	1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.28		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.94	F1	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.057		0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120747-1	1314V3-01-B43 (0-2)	Solid	11/29/16 08:45	11/30/16 10:20
500-120747-3	1314V3-01-B41 (0-2)	Solid	11/29/16 09:05	11/30/16 10:20
500-120747-4	1314V3-01-B40 (0-2)	Solid	11/29/16 09:15	11/30/16 10:20
500-120747-6	1314V3-01-B19 (0-5)	Solid	11/29/16 13:25	11/30/16 10:20
500-120747-7	1314V3-01-B18 (0-7)	Solid	11/29/16 13:45	11/30/16 10:20
500-120747-8	1314V3-01-B17 (0-7)	Solid	11/29/16 14:05	11/30/16 10:20
500-120747-9	1314V3-01-B16 (0-6)	Solid	11/29/16 14:20	11/30/16 10:20
500-120747-10	1314V3-01-B15 (0-7)	Solid	11/29/16 15:00	11/30/16 10:20
500-120747-11	1314V3-01-B15 (7-13)	Solid	11/29/16 15:05	11/30/16 10:20
500-120747-12	1314V3-01-B14 (0-6)	Solid	11/29/16 15:25	11/30/16 10:20
500-120747-13	1314V3-01-B14 (6-12)	Solid	11/29/16 15:30	11/30/16 10:20
500-120747-14	1314V3-01-B12 (0-6)	Solid	11/29/16 16:10	11/30/16 10:20
500-120747-15	1314V3-01-B12 (6-11)	Solid	11/29/16 16:15	11/30/16 10:20
500-120747-17	1314V3-01-B22 (0-7)	Solid	11/29/16 16:55	11/30/16 10:20

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B43 (0-2)

Lab Sample ID: 500-120747-1

Date Collected: 11/29/16 08:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 10:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 120	11/30/16 13:20	12/06/16 10:59	1
Dibromofluoromethane	104		75 - 120	11/30/16 13:20	12/06/16 10:59	1
1,2-Dichloroethane-d4 (Surr)	98		69 - 134	11/30/16 13:20	12/06/16 10:59	1
Toluene-d8 (Surr)	105		75 - 123	11/30/16 13:20	12/06/16 10:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B43 (0-2)

Lab Sample ID: 500-120747-1

Date Collected: 11/29/16 08:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Hexachlorocyclopentadiene	<0.79	F1	0.79	0.22	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,4-Dinitrophenol	<0.79	F1	0.79	0.69	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
4,6-Dinitro-2-methylphenol	<0.79	F2	0.79	0.31	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Phenanthrene	0.064		0.039	0.0054	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Anthracene	0.0099	J	0.039	0.0065	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Fluoranthene	0.11		0.039	0.0072	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Pyrene	0.12	F1	0.039	0.0078	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.074	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Benzo[a]anthracene	0.056		0.039	0.0053	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B43 (0-2)

Lab Sample ID: 500-120747-1

Date Collected: 11/29/16 08:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.074		0.039	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
3,3'-Dichlorobenzidine	<0.20	F1	0.20	0.055	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.071	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Benzo[b]fluoranthene	0.11		0.039	0.0084	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Benzo[k]fluoranthene	0.033	J	0.039	0.012	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Benzo[a]pyrene	0.072		0.039	0.0076	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Indeno[1,2,3-cd]pyrene	0.039		0.039	0.010	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Dibenz(a,h)anthracene	<0.039	F1	0.039	0.0075	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Benzo[g,h,i]perylene	0.091	F1	0.039	0.013	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/08/16 02:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		40 - 130				12/07/16 07:41	12/08/16 02:33	1
Phenol-d5	78		36 - 123				12/07/16 07:41	12/08/16 02:33	1
Nitrobenzene-d5	83		33 - 124				12/07/16 07:41	12/08/16 02:33	1
2-Fluorobiphenyl	81		42 - 115				12/07/16 07:41	12/08/16 02:33	1
2,4,6-Tribromophenol	64		25 - 130				12/07/16 07:41	12/08/16 02:33	1
Terphenyl-d14	98		25 - 150				12/07/16 07:41	12/08/16 02:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.24	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Arsenic	5.7		0.57	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Barium	85		0.57	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Beryllium	0.49		0.23	0.049	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Boron	2.1	J	2.8	0.40	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Cadmium	0.30		0.11	0.033	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Calcium	14000		11	3.7	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Chromium	13	B	0.57	0.098	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Cobalt	8.1		0.28	0.064	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Copper	15		0.57	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Iron	14000		11	4.4	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Lead	91		0.28	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Magnesium	5900		5.7	2.3	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Manganese	480		0.57	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Nickel	20		0.57	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Potassium	680		28	4.6	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Selenium	0.60		0.57	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Sodium	370		57	7.5	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Vanadium	20		0.28	0.083	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1
Zinc	81		1.1	0.36	mg/Kg	☼	11/30/16 15:02	12/01/16 14:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.97		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 08:13	1
Boron	0.12	J	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:13	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B43 (0-2)

Lab Sample ID: 500-120747-1

Date Collected: 11/29/16 08:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 08:13	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:13	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:13	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 08:13	1
Lead	0.0090		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 08:13	1
Manganese	0.21		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:13	1
Nickel	0.010	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:13	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 08:13	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:13	1
Zinc	0.11	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 08:13	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.14		0.0075	0.0075	mg/L		12/05/16 08:16	12/05/16 23:01	1
Manganese	0.69		0.025	0.010	mg/L		12/05/16 08:16	12/05/16 23:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:00	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.019	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 10:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/02/16 15:06	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B41 (0-2)

Lab Sample ID: 500-120747-3

Date Collected: 11/29/16 09:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 11:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	11/30/16 13:20	12/06/16 11:50	1
Dibromofluoromethane	105		75 - 120	11/30/16 13:20	12/06/16 11:50	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/30/16 13:20	12/06/16 11:50	1
Toluene-d8 (Surr)	106		75 - 123	11/30/16 13:20	12/06/16 11:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B41 (0-2)

Lab Sample ID: 500-120747-3

Date Collected: 11/29/16 09:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Phenanthrene	0.013	J	0.040	0.0056	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Fluoranthene	0.040		0.040	0.0074	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Pyrene	0.032	J	0.040	0.0080	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Benzo[a]anthracene	0.019	J	0.040	0.0054	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B41 (0-2)

Lab Sample ID: 500-120747-3

Date Collected: 11/29/16 09:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.040	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Benzo[b]fluoranthene	0.031	J	0.040	0.0087	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Benzo[g,h,i]perylene	0.015	J	0.040	0.013	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/07/16 07:41	12/07/16 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		40 - 130				12/07/16 07:41	12/07/16 19:33	1
Phenol-d5	85		36 - 123				12/07/16 07:41	12/07/16 19:33	1
Nitrobenzene-d5	85		33 - 124				12/07/16 07:41	12/07/16 19:33	1
2-Fluorobiphenyl	80		42 - 115				12/07/16 07:41	12/07/16 19:33	1
2,4,6-Tribromophenol	87		25 - 130				12/07/16 07:41	12/07/16 19:33	1
Terphenyl-d14	86		25 - 150				12/07/16 07:41	12/07/16 19:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.24	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Arsenic	5.1		0.57	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Barium	73		0.57	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Beryllium	0.47		0.23	0.050	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Boron	2.6	J	2.9	0.40	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Cadmium	0.22		0.11	0.033	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Calcium	19000		11	3.7	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Chromium	13	B	0.57	0.099	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Cobalt	8.0		0.29	0.065	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Copper	14		0.57	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Iron	13000		11	4.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Lead	32		0.29	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Magnesium	11000		5.7	2.3	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Manganese	370		0.57	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Nickel	19		0.57	0.16	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Potassium	680		29	4.7	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Selenium	0.74		0.57	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Sodium	360		57	7.6	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Vanadium	20		0.29	0.084	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1
Zinc	57		1.1	0.36	mg/Kg	☼	11/30/16 15:02	12/01/16 15:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.2		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 08:27	1
Boron	0.082	J	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:27	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B41 (0-2)

Lab Sample ID: 500-120747-3

Date Collected: 11/29/16 09:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 08:27	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:27	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:27	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 08:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 08:27	1
Manganese	0.31		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:27	1
Nickel	0.011	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:27	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 08:27	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:27	1
Zinc	0.048	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 08:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.89		0.025	0.010	mg/L		12/05/16 08:16	12/05/16 23:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:06	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.019	0.0099	mg/Kg	☼	12/02/16 14:45	12/05/16 10:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU			12/02/16 15:20	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B40 (0-2)

Lab Sample ID: 500-120747-4

Date Collected: 11/29/16 09:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	11/30/16 13:20	12/06/16 12:16	1
Dibromofluoromethane	106		75 - 120	11/30/16 13:20	12/06/16 12:16	1
1,2-Dichloroethane-d4 (Surr)	97		69 - 134	11/30/16 13:20	12/06/16 12:16	1
Toluene-d8 (Surr)	105		75 - 123	11/30/16 13:20	12/06/16 12:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B40 (0-2)

Lab Sample ID: 500-120747-4

Date Collected: 11/29/16 09:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Fluoranthene	0.024	J	0.039	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Pyrene	0.026	J	0.039	0.0079	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Benzo[a]anthracene	0.018	J	0.039	0.0053	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B40 (0-2)

Lab Sample ID: 500-120747-4

Date Collected: 11/29/16 09:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.019	J	0.039	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Benzo[b]fluoranthene	0.025	J	0.039	0.0085	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Indeno[1,2,3-cd]pyrene	0.012	J	0.039	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/07/16 07:41	12/07/16 20:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	89		40 - 130				12/07/16 07:41	12/07/16 20:01	1
Phenol-d5	84		36 - 123				12/07/16 07:41	12/07/16 20:01	1
Nitrobenzene-d5	88		33 - 124				12/07/16 07:41	12/07/16 20:01	1
2-Fluorobiphenyl	81		42 - 115				12/07/16 07:41	12/07/16 20:01	1
2,4,6-Tribromophenol	83		25 - 130				12/07/16 07:41	12/07/16 20:01	1
Terphenyl-d14	89		25 - 150				12/07/16 07:41	12/07/16 20:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Arsenic	5.0		0.56	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Barium	67		0.56	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Beryllium	0.41		0.23	0.049	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Boron	2.3	J	2.8	0.39	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Cadmium	0.19		0.11	0.033	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Calcium	22000		11	3.6	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Chromium	11	B	0.56	0.097	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Cobalt	8.1		0.28	0.064	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Copper	12		0.56	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Iron	13000		11	4.3	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Lead	13		0.28	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Magnesium	12000		5.6	2.3	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Manganese	390		0.56	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Nickel	19		0.56	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Potassium	710		28	4.6	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Selenium	0.51	J	0.56	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Sodium	720		56	7.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Vanadium	19		0.28	0.082	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1
Zinc	46		1.1	0.36	mg/Kg	☼	11/30/16 15:02	12/01/16 15:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.1		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 08:33	1
Boron	0.061	J	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:33	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B40 (0-2)

Lab Sample ID: 500-120747-4

Date Collected: 11/29/16 09:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 08:33	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:33	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:33	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 08:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 08:33	1
Manganese	0.41		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:33	1
Nickel	0.012	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:33	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 08:33	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:33	1
Zinc	0.024	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 08:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.2		0.025	0.010	mg/L		12/05/16 08:16	12/05/16 23:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:10	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.019	0.0098	mg/Kg	☼	12/02/16 14:45	12/05/16 10:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/02/16 15:27	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B19 (0-5)

Lab Sample ID: 500-120747-6

Date Collected: 11/29/16 13:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	11/30/16 13:20	12/06/16 13:07	1
Dibromofluoromethane	103		75 - 120	11/30/16 13:20	12/06/16 13:07	1
1,2-Dichloroethane-d4 (Surr)	95		69 - 134	11/30/16 13:20	12/06/16 13:07	1
Toluene-d8 (Surr)	104		75 - 123	11/30/16 13:20	12/06/16 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B19 (0-5)

Lab Sample ID: 500-120747-6

Date Collected: 11/29/16 13:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Fluoranthene	0.0080	J	0.036	0.0067	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Pyrene	0.010	J	0.036	0.0072	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B19 (0-5)

Lab Sample ID: 500-120747-6

Date Collected: 11/29/16 13:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		40 - 130	12/07/16 07:41	12/07/16 20:57	1
Phenol-d5	83		36 - 123	12/07/16 07:41	12/07/16 20:57	1
Nitrobenzene-d5	80		33 - 124	12/07/16 07:41	12/07/16 20:57	1
2-Fluorobiphenyl	75		42 - 115	12/07/16 07:41	12/07/16 20:57	1
2,4,6-Tribromophenol	75		25 - 130	12/07/16 07:41	12/07/16 20:57	1
Terphenyl-d14	83		25 - 150	12/07/16 07:41	12/07/16 20:57	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Arsenic	3.2		0.54	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Barium	59		0.54	0.099	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Beryllium	0.45		0.22	0.047	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Boron	1.8 J		2.7	0.38	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Cadmium	0.14		0.11	0.031	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Calcium	19000		11	3.5	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Chromium	9.7 B		0.54	0.093	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Cobalt	6.9		0.27	0.061	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Copper	10		0.54	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Iron	11000		11	4.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Lead	10		0.27	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Magnesium	9500		5.4	2.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Manganese	350		0.54	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Nickel	15		0.54	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Potassium	600		27	4.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Selenium	0.66		0.54	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Sodium	150		54	7.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Vanadium	15		0.27	0.079	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1
Zinc	34		1.1	0.34	mg/Kg	☼	11/30/16 15:02	12/01/16 15:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:03	1
Boron	0.078 J		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:03	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B19 (0-5)

Lab Sample ID: 500-120747-6

Date Collected: 11/29/16 13:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:03	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:03	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:03	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:03	1
Manganese	1.0		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:03	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:03	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:03	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:03	1
Zinc	0.068	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.21		0.025	0.010	mg/L		12/05/16 08:16	12/05/16 23:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:17	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.017	0.0088	mg/Kg	☼	12/02/16 14:45	12/05/16 10:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			12/02/16 15:42	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B18 (0-7)

Lab Sample ID: 500-120747-7

Date Collected: 11/29/16 13:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Vinyl acetate	<0.0039		0.0039	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 120	11/30/16 13:20	12/06/16 13:32	1
Dibromofluoromethane	109		75 - 120	11/30/16 13:20	12/06/16 13:32	1
1,2-Dichloroethane-d4 (Surr)	98		69 - 134	11/30/16 13:20	12/06/16 13:32	1
Toluene-d8 (Surr)	106		75 - 123	11/30/16 13:20	12/06/16 13:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B18 (0-7)

Lab Sample ID: 500-120747-7

Date Collected: 11/29/16 13:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Hexachlorobenzene	<0.074		0.074	0.0086	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Phenanthrene	0.0076	J	0.037	0.0051	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B18 (0-7)

Lab Sample ID: 500-120747-7

Date Collected: 11/29/16 13:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 21:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	85		40 - 130	12/07/16 07:41	12/07/16 21:25	1
Phenol-d5	82		36 - 123	12/07/16 07:41	12/07/16 21:25	1
Nitrobenzene-d5	82		33 - 124	12/07/16 07:41	12/07/16 21:25	1
2-Fluorobiphenyl	77		42 - 115	12/07/16 07:41	12/07/16 21:25	1
2,4,6-Tribromophenol	85		25 - 130	12/07/16 07:41	12/07/16 21:25	1
Terphenyl-d14	86		25 - 150	12/07/16 07:41	12/07/16 21:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Arsenic	5.3		0.54	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Barium	24		0.54	0.098	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Beryllium	0.51		0.21	0.047	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Boron	2.1 J		2.7	0.38	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Cadmium	0.098 J		0.11	0.031	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Calcium	64000		110	35	mg/Kg	☼	11/30/16 15:02	12/01/16 17:48	10
Chromium	9.2 B		0.54	0.092	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Cobalt	11		0.27	0.061	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Copper	12		0.54	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Iron	14000		11	4.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Lead	8.6		0.27	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Magnesium	19000		5.4	2.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Manganese	290		0.54	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Nickel	19		0.54	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Potassium	750		27	4.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Selenium	0.57		0.54	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Sodium	82		54	7.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Thallium	<0.54		0.54	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Vanadium	14		0.27	0.078	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1
Zinc	36		1.1	0.34	mg/Kg	☼	11/30/16 15:02	12/01/16 15:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.78		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:10	1
Boron	0.068 J		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:10	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B18 (0-7)

Lab Sample ID: 500-120747-7

Date Collected: 11/29/16 13:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:10	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:10	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:10	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:10	1
Manganese	3.5		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:10	1
Nickel	0.029		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:10	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:10	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:10	1
Zinc	0.046	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 08:16	12/05/16 23:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.017	0.0090	mg/Kg	☼	12/02/16 14:45	12/05/16 10:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B17 (0-7)

Lab Sample ID: 500-120747-8

Date Collected: 11/29/16 14:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	11/30/16 13:20	12/06/16 13:57	1
Dibromofluoromethane	106		75 - 120	11/30/16 13:20	12/06/16 13:57	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/30/16 13:20	12/06/16 13:57	1
Toluene-d8 (Surr)	106		75 - 123	11/30/16 13:20	12/06/16 13:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B17 (0-7)

Lab Sample ID: 500-120747-8

Date Collected: 11/29/16 14:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.30	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B17 (0-7)

Lab Sample ID: 500-120747-8

Date Collected: 11/29/16 14:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130				12/07/16 07:41	12/07/16 21:53	1
Phenol-d5	88		36 - 123				12/07/16 07:41	12/07/16 21:53	1
Nitrobenzene-d5	88		33 - 124				12/07/16 07:41	12/07/16 21:53	1
2-Fluorobiphenyl	82		42 - 115				12/07/16 07:41	12/07/16 21:53	1
2,4,6-Tribromophenol	87		25 - 130				12/07/16 07:41	12/07/16 21:53	1
Terphenyl-d14	88		25 - 150				12/07/16 07:41	12/07/16 21:53	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Arsenic	3.1		0.54	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Barium	32		0.54	0.099	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Beryllium	0.38		0.22	0.047	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Boron	2.5 J		2.7	0.38	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Cadmium	0.11		0.11	0.031	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Calcium	77000		110	35	mg/Kg	☼	11/30/16 15:02	12/01/16 17:52	10
Chromium	7.8 B		0.54	0.093	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Cobalt	6.1		0.27	0.061	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Copper	10		0.54	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Iron	10000		11	4.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Lead	7.0		0.27	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Magnesium	24000		5.4	2.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Manganese	270		0.54	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Nickel	16		0.54	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Potassium	640		27	4.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Selenium	0.35 J		0.54	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Sodium	85		54	7.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Vanadium	11		0.27	0.079	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1
Zinc	30		1.1	0.34	mg/Kg	☼	11/30/16 15:02	12/01/16 15:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.81		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:16	1
Boron	<0.50		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:16	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B17 (0-7)

Lab Sample ID: 500-120747-8

Date Collected: 11/29/16 14:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:16	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:16	1
Cobalt	0.023	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:16	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:16	1
Manganese	4.1		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:16	1
Nickel	0.037		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:16	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:16	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:16	1
Zinc	<0.50		0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.057		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.019	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 10:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			12/02/16 15:56	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B16 (0-6)

Lab Sample ID: 500-120747-9

Date Collected: 11/29/16 14:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 120	11/30/16 13:20	12/06/16 14:22	1
Dibromofluoromethane	106		75 - 120	11/30/16 13:20	12/06/16 14:22	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	11/30/16 13:20	12/06/16 14:22	1
Toluene-d8 (Surr)	105		75 - 123	11/30/16 13:20	12/06/16 14:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B16 (0-6)

Lab Sample ID: 500-120747-9

Date Collected: 11/29/16 14:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B16 (0-6)

Lab Sample ID: 500-120747-9

Date Collected: 11/29/16 14:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	87		40 - 130	12/07/16 07:41	12/07/16 22:21	1
Phenol-d5	83		36 - 123	12/07/16 07:41	12/07/16 22:21	1
Nitrobenzene-d5	84		33 - 124	12/07/16 07:41	12/07/16 22:21	1
2-Fluorobiphenyl	79		42 - 115	12/07/16 07:41	12/07/16 22:21	1
2,4,6-Tribromophenol	85		25 - 130	12/07/16 07:41	12/07/16 22:21	1
Terphenyl-d14	90		25 - 150	12/07/16 07:41	12/07/16 22:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Arsenic	4.7		0.53	0.24	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Barium	28		0.53	0.097	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Beryllium	0.38		0.21	0.046	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Boron	2.6		2.6	0.37	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Cadmium	0.084	J	0.11	0.031	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Calcium	110000		110	34	mg/Kg	☼	11/30/16 15:02	12/01/16 17:56	10
Chromium	8.1	B	0.53	0.091	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Cobalt	6.0		0.26	0.060	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Copper	11		0.53	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Iron	12000		11	4.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Lead	7.5		0.26	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Magnesium	32000		5.3	2.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Manganese	310		0.53	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Nickel	14		0.53	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Potassium	640		26	4.3	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Selenium	0.28	J	0.53	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Sodium	98		53	7.0	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Vanadium	13		0.26	0.077	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1
Zinc	28		1.1	0.33	mg/Kg	☼	11/30/16 15:02	12/01/16 15:32	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:23	1
Boron	0.064	J	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B16 (0-6)

Lab Sample ID: 500-120747-9

Date Collected: 11/29/16 14:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:23	1
Cobalt	0.023	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:23	1
Iron	0.44		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:23	1
Manganese	3.7		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:23	1
Nickel	0.046		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:23	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:23	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:23	1
Zinc	0.034	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.039		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:34	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.017	0.0091	mg/Kg	☼	12/02/16 14:45	12/05/16 10:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/16 16:03	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (0-7)

Lab Sample ID: 500-120747-10

Date Collected: 11/29/16 15:00

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 120	11/30/16 13:20	12/06/16 14:46	1
Dibromofluoromethane	106		75 - 120	11/30/16 13:20	12/06/16 14:46	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	11/30/16 13:20	12/06/16 14:46	1
Toluene-d8 (Surr)	107		75 - 123	11/30/16 13:20	12/06/16 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (0-7)

Lab Sample ID: 500-120747-10

Date Collected: 11/29/16 15:00

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Hexachlorobenzene	<0.074		0.074	0.0086	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (0-7)

Lab Sample ID: 500-120747-10

Date Collected: 11/29/16 15:00

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		40 - 130	12/07/16 07:41	12/07/16 22:49	1
Phenol-d5	79		36 - 123	12/07/16 07:41	12/07/16 22:49	1
Nitrobenzene-d5	80		33 - 124	12/07/16 07:41	12/07/16 22:49	1
2-Fluorobiphenyl	75		42 - 115	12/07/16 07:41	12/07/16 22:49	1
2,4,6-Tribromophenol	76		25 - 130	12/07/16 07:41	12/07/16 22:49	1
Terphenyl-d14	82		25 - 150	12/07/16 07:41	12/07/16 22:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Arsenic	2.2		0.54	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Barium	30		0.54	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Beryllium	0.46		0.22	0.047	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Boron	1.3 J		2.7	0.38	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Cadmium	0.12		0.11	0.032	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Calcium	60000		110	35	mg/Kg	☼	11/30/16 15:02	12/01/16 18:12	10
Chromium	8.1 B		0.54	0.094	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Cobalt	5.5		0.27	0.062	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Copper	9.9		0.54	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Iron	9300		11	4.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Lead	7.6		0.27	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Magnesium	17000		5.4	2.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Manganese	270		0.54	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Nickel	13		0.54	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Potassium	570		27	4.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Selenium	0.69		0.54	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Sodium	65		54	7.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Vanadium	11		0.27	0.080	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1
Zinc	30		1.1	0.34	mg/Kg	☼	11/30/16 15:02	12/01/16 15:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:30	1
Boron	<0.50		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:30	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (0-7)

Lab Sample ID: 500-120747-10

Date Collected: 11/29/16 15:00

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:30	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:30	1
Cobalt	0.021	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:30	1
Iron	0.26	J	0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:30	1
Manganese	4.0		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:30	1
Nickel	0.037		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:30	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:30	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:30	1
Zinc	0.024	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.052		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.017	0.0089	mg/Kg	☼	12/02/16 14:45	12/05/16 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/02/16 16:10	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (7-13)

Lab Sample ID: 500-120747-11

Date Collected: 11/29/16 15:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	11/30/16 13:20	12/06/16 15:12	1
Dibromofluoromethane	107		75 - 120	11/30/16 13:20	12/06/16 15:12	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	11/30/16 13:20	12/06/16 15:12	1
Toluene-d8 (Surr)	105		75 - 123	11/30/16 13:20	12/06/16 15:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.082	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (7-13)

Lab Sample ID: 500-120747-11

Date Collected: 11/29/16 15:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Acenaphthylene	<0.037		0.037	0.0048	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Anthracene	<0.037		0.037	0.0061	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Benzo[a]anthracene	<0.037		0.037	0.0049	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (7-13)

Lab Sample ID: 500-120747-11

Date Collected: 11/29/16 15:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Benzo[b]fluoranthene	<0.037		0.037	0.0079	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0095	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 23:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		40 - 130	12/07/16 07:41	12/07/16 23:17	1
Phenol-d5	75		36 - 123	12/07/16 07:41	12/07/16 23:17	1
Nitrobenzene-d5	76		33 - 124	12/07/16 07:41	12/07/16 23:17	1
2-Fluorobiphenyl	71		42 - 115	12/07/16 07:41	12/07/16 23:17	1
2,4,6-Tribromophenol	79		25 - 130	12/07/16 07:41	12/07/16 23:17	1
Terphenyl-d14	80		25 - 150	12/07/16 07:41	12/07/16 23:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Arsenic	2.8		0.54	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Barium	35		0.54	0.098	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Beryllium	0.45		0.21	0.046	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Boron	1.6 J		2.7	0.37	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Cadmium	0.12		0.11	0.031	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Calcium	26000		11	3.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Chromium	8.9 B		0.54	0.092	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Cobalt	6.0		0.27	0.060	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Copper	10		0.54	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Iron	11000		11	4.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Lead	7.6		0.27	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Magnesium	10000		5.4	2.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Manganese	230		0.54	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Nickel	15		0.54	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Potassium	560		27	4.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Selenium	0.57		0.54	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Sodium	55		54	7.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Thallium	<0.54		0.54	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Vanadium	13		0.27	0.078	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1
Zinc	30		1.1	0.34	mg/Kg	☼	11/30/16 15:02	12/01/16 15:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.1		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:37	1
Boron	0.083 J		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:37	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B15 (7-13)

Lab Sample ID: 500-120747-11

Date Collected: 11/29/16 15:05

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:37	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:37	1
Cobalt	0.019	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:37	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:37	1
Manganese	1.8		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:37	1
Nickel	0.023	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:37	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:37	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:37	1
Zinc	0.040	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.20		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:41	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.018	0.0093	mg/Kg	☼	12/02/16 14:45	12/05/16 10:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			12/02/16 16:17	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (0-6)

Lab Sample ID: 500-120747-12

Date Collected: 11/29/16 15:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	11/30/16 13:20	12/06/16 15:37	1
Dibromofluoromethane	105		75 - 120	11/30/16 13:20	12/06/16 15:37	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/30/16 13:20	12/06/16 15:37	1
Toluene-d8 (Surr)	103		75 - 123	11/30/16 13:20	12/06/16 15:37	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	☼	12/07/16 07:41	12/07/16 23:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (0-6)

Lab Sample ID: 500-120747-12

Date Collected: 11/29/16 15:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (0-6)

Lab Sample ID: 500-120747-12

Date Collected: 11/29/16 15:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	85		40 - 130				12/07/16 07:41	12/07/16 23:45	1
Phenol-d5	73		36 - 123				12/07/16 07:41	12/07/16 23:45	1
Nitrobenzene-d5	78		33 - 124				12/07/16 07:41	12/07/16 23:45	1
2-Fluorobiphenyl	72		42 - 115				12/07/16 07:41	12/07/16 23:45	1
2,4,6-Tribromophenol	78		25 - 130				12/07/16 07:41	12/07/16 23:45	1
Terphenyl-d14	82		25 - 150				12/07/16 07:41	12/07/16 23:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Arsenic	3.3		0.55	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Barium	69		0.55	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Beryllium	0.59		0.22	0.048	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Boron	1.2 J		2.8	0.39	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Cadmium	0.078 J		0.11	0.032	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Calcium	2700		11	3.6	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Chromium	16 B		0.55	0.095	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Cobalt	8.3		0.28	0.062	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Copper	16		0.55	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Iron	16000		11	4.3	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Lead	9.4		0.28	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Magnesium	3100		5.5	2.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Manganese	250		0.55	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Nickel	22		0.55	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Potassium	660		28	4.5	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Selenium	0.81		0.55	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Sodium	160		55	7.3	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Vanadium	24		0.28	0.081	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1
Zinc	35		1.1	0.35	mg/Kg	☼	11/30/16 15:02	12/01/16 15:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.54		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:43	1
Boron	0.082 J		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (0-6)

Lab Sample ID: 500-120747-12

Date Collected: 11/29/16 15:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:43	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:43	1
Cobalt	0.036		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:43	1
Iron	2.8		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:43	1
Manganese	1.7		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:43	1
Nickel	0.040		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:43	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:43	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:43	1
Zinc	0.029	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.38		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:44	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.020	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 16:24	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (6-12)

Lab Sample ID: 500-120747-13

Date Collected: 11/29/16 15:30

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.022		0.022	0.0097	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Benzene	<0.0022		0.0022	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Bromoform	<0.0022		0.0022	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
2-Butanone (MEK)	<0.0056		0.0056	0.0025	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Carbon disulfide	<0.0056		0.0056	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Chlorobenzene	<0.0022		0.0022	0.00082	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Chloroethane	<0.0056		0.0056	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Chloroform	<0.0022		0.0022	0.00077	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Chloromethane	<0.0056		0.0056	0.0022	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Dibromochloromethane	<0.0022		0.0022	0.00073	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,1-Dichloroethane	<0.0022		0.0022	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,2-Dichloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,1-Dichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
2-Hexanone	<0.0056		0.0056	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Methylene Chloride	<0.0056		0.0056	0.0022	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Styrene	<0.0022		0.0022	0.00067	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Tetrachloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00098	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00095	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Trichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Vinyl acetate	<0.0056		0.0056	0.0019	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Vinyl chloride	<0.0022		0.0022	0.00098	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1
Xylenes, Total	<0.0044		0.0044	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 16:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 120	11/30/16 13:20	12/06/16 16:03	1
Dibromofluoromethane	104		75 - 120	11/30/16 13:20	12/06/16 16:03	1
1,2-Dichloroethane-d4 (Surr)	98		69 - 134	11/30/16 13:20	12/06/16 16:03	1
Toluene-d8 (Surr)	104		75 - 123	11/30/16 13:20	12/06/16 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (6-12)

Lab Sample ID: 500-120747-13

Date Collected: 11/29/16 15:30

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (6-12)

Lab Sample ID: 500-120747-13

Date Collected: 11/29/16 15:30

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/07/16 07:41	12/08/16 00:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	76		40 - 130				12/07/16 07:41	12/08/16 00:13	1
Phenol-d5	70		36 - 123				12/07/16 07:41	12/08/16 00:13	1
Nitrobenzene-d5	76		33 - 124				12/07/16 07:41	12/08/16 00:13	1
2-Fluorobiphenyl	70		42 - 115				12/07/16 07:41	12/08/16 00:13	1
2,4,6-Tribromophenol	80		25 - 130				12/07/16 07:41	12/08/16 00:13	1
Terphenyl-d14	80		25 - 150				12/07/16 07:41	12/08/16 00:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Arsenic	3.1		0.60	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Barium	220		0.60	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Beryllium	0.72		0.24	0.052	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Boron	1.8 J		3.0	0.42	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Cadmium	0.17		0.12	0.035	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Calcium	3900		12	3.9	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Chromium	13 B		0.60	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Cobalt	6.1		0.30	0.068	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Copper	11		0.60	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Iron	12000		12	4.7	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Lead	10		0.30	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Magnesium	2300		6.0	2.5	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Manganese	220		0.60	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Nickel	14		0.60	0.16	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Potassium	560		30	4.9	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Selenium	1.0		0.60	0.30	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Sodium	56 J		60	8.0	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Vanadium	23		0.30	0.088	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1
Zinc	34		1.2	0.38	mg/Kg	☼	11/30/16 15:02	12/01/16 15:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.49 J		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:50	1
Boron	0.090 J		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:50	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B14 (6-12)

Lab Sample ID: 500-120747-13

Date Collected: 11/29/16 15:30

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:50	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:50	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:50	1
Iron	12		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:50	1
Manganese	2.8		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:50	1
Nickel	0.024	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:50	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:50	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:50	1
Zinc	0.045	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:50	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	69		0.20	0.20	mg/L		12/08/16 10:20	12/08/16 17:01	1
Manganese	0.40		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:48	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.020	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 10:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/16 16:32	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (0-6)

Lab Sample ID: 500-120747-14

Date Collected: 11/29/16 16:10

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	11/30/16 13:20	12/06/16 16:28	1
Dibromofluoromethane	105		75 - 120	11/30/16 13:20	12/06/16 16:28	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/30/16 13:20	12/06/16 16:28	1
Toluene-d8 (Surr)	104		75 - 123	11/30/16 13:20	12/06/16 16:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (0-6)

Lab Sample ID: 500-120747-14

Date Collected: 11/29/16 16:10

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (0-6)

Lab Sample ID: 500-120747-14

Date Collected: 11/29/16 16:10

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/07/16 07:41	12/08/16 00:41	1
Phenol-d5	74		36 - 123	12/07/16 07:41	12/08/16 00:41	1
Nitrobenzene-d5	81		33 - 124	12/07/16 07:41	12/08/16 00:41	1
2-Fluorobiphenyl	76		42 - 115	12/07/16 07:41	12/08/16 00:41	1
2,4,6-Tribromophenol	80		25 - 130	12/07/16 07:41	12/08/16 00:41	1
Terphenyl-d14	83		25 - 150	12/07/16 07:41	12/08/16 00:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Arsenic	3.3		0.55	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Barium	53		0.55	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Beryllium	0.36		0.22	0.048	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Boron	1.4	J	2.7	0.38	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Cadmium	0.18		0.11	0.032	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Calcium	14000		11	3.5	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Chromium	8.3	B	0.55	0.094	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Cobalt	5.9		0.27	0.062	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Copper	7.3		0.55	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Iron	9500		11	4.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Lead	8.2		0.27	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Magnesium	3300		5.5	2.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Manganese	450		0.55	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Nickel	14		0.55	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Potassium	560		27	4.5	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Selenium	0.41	J	0.55	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Sodium	230		55	7.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Vanadium	13		0.27	0.080	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1
Zinc	29		1.1	0.35	mg/Kg	☼	11/30/16 15:02	12/01/16 15:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 09:57	1
Boron	0.061	J	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 09:57	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (0-6)

Lab Sample ID: 500-120747-14

Date Collected: 11/29/16 16:10

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 09:57	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:57	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:57	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 09:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 09:57	1
Manganese	0.60		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:57	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:57	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 09:57	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 09:57	1
Zinc	0.021	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 09:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.46		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:51	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.017	0.0091	mg/Kg	☼	12/02/16 14:45	12/05/16 10:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/02/16 16:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (6-11)

Lab Sample ID: 500-120747-15

Date Collected: 11/29/16 16:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 16:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	11/30/16 13:20	12/06/16 16:54	1
Dibromofluoromethane	109		75 - 120	11/30/16 13:20	12/06/16 16:54	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	11/30/16 13:20	12/06/16 16:54	1
Toluene-d8 (Surr)	103		75 - 123	11/30/16 13:20	12/06/16 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (6-11)

Lab Sample ID: 500-120747-15

Date Collected: 11/29/16 16:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (6-11)

Lab Sample ID: 500-120747-15

Date Collected: 11/29/16 16:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/07/16 07:41	12/08/16 01:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	87		40 - 130	12/07/16 07:41	12/08/16 01:09	1
Phenol-d5	76		36 - 123	12/07/16 07:41	12/08/16 01:09	1
Nitrobenzene-d5	85		33 - 124	12/07/16 07:41	12/08/16 01:09	1
2-Fluorobiphenyl	77		42 - 115	12/07/16 07:41	12/08/16 01:09	1
2,4,6-Tribromophenol	83		25 - 130	12/07/16 07:41	12/08/16 01:09	1
Terphenyl-d14	85		25 - 150	12/07/16 07:41	12/08/16 01:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Arsenic	5.4		0.58	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Barium	74		0.58	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Beryllium	0.46		0.23	0.050	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Boron	1.6 J		2.9	0.41	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Cadmium	0.25		0.12	0.034	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Calcium	6000		12	3.7	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Chromium	11 B		0.58	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Cobalt	7.6		0.29	0.066	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Copper	11		0.58	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Iron	13000		12	4.5	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Lead	8.5		0.29	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Magnesium	4100		5.8	2.4	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Manganese	510		0.58	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Nickel	20		0.58	0.16	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Potassium	690		29	4.7	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Selenium	0.50 J		0.58	0.29	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Sodium	120		58	7.7	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Vanadium	19		0.29	0.085	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1
Zinc	39		1.2	0.37	mg/Kg	☼	11/30/16 15:02	12/01/16 15:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.51		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 10:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 10:04	1
Boron	0.068 J		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 10:04	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B12 (6-11)

Lab Sample ID: 500-120747-15

Date Collected: 11/29/16 16:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 10:04	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:04	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:04	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 10:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 10:04	1
Manganese	0.021	J	0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:04	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:04	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 10:04	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:04	1
Zinc	0.020	J B	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 10:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 14:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:54	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.018	0.0094	mg/Kg	☼	12/02/16 14:45	12/05/16 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/02/16 16:46	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B22 (0-7)

Lab Sample ID: 500-120747-17

Date Collected: 11/29/16 16:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	11/30/16 13:20	12/06/16 17:44	1
Dibromofluoromethane	108		75 - 120	11/30/16 13:20	12/06/16 17:44	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	11/30/16 13:20	12/06/16 17:44	1
Toluene-d8 (Surr)	105		75 - 123	11/30/16 13:20	12/06/16 17:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B22 (0-7)

Lab Sample ID: 500-120747-17

Date Collected: 11/29/16 16:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B22 (0-7)

Lab Sample ID: 500-120747-17

Date Collected: 11/29/16 16:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130				12/07/16 07:41	12/08/16 02:05	1
Phenol-d5	82		36 - 123				12/07/16 07:41	12/08/16 02:05	1
Nitrobenzene-d5	92		33 - 124				12/07/16 07:41	12/08/16 02:05	1
2-Fluorobiphenyl	82		42 - 115				12/07/16 07:41	12/08/16 02:05	1
2,4,6-Tribromophenol	82		25 - 130				12/07/16 07:41	12/08/16 02:05	1
Terphenyl-d14	90		25 - 150				12/07/16 07:41	12/08/16 02:05	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.23	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Arsenic	2.6		0.56	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Barium	78	F1	0.56	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Beryllium	0.40		0.22	0.048	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Boron	2.1	J F1	2.8	0.39	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Cadmium	0.22		0.11	0.032	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Calcium	16000		11	3.6	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Chromium	8.3	B	0.56	0.096	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Cobalt	6.3		0.28	0.063	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Copper	8.0	F1	0.56	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Iron	9400		11	4.3	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Lead	7.4	F1 F2	0.28	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Magnesium	9800		5.6	2.3	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Manganese	510		0.56	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Nickel	14		0.56	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Potassium	680	F1	28	4.5	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Selenium	0.57	F1	0.56	0.28	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Silver	<0.28	F1	0.28	0.065	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Sodium	1200	F1 F2	56	7.3	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Vanadium	11		0.28	0.081	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1
Zinc	35	F1	1.1	0.35	mg/Kg	☼	11/30/16 15:02	12/01/16 16:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.48	J	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 10:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 10:31	1
Boron	0.098	J	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 10:31	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Client Sample ID: 1314V3-01-B22 (0-7)

Lab Sample ID: 500-120747-17

Date Collected: 11/29/16 16:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 10:31	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:31	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:31	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 10:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 10:31	1
Manganese	0.28		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:31	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:31	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 10:31	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:31	1
Zinc	<0.50		0.50	0.020	mg/L		12/03/16 09:49	12/04/16 10:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.94	F1	0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 15:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 15:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057		0.018	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 11:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 17:00	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120747-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534



500-120747 COC

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

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

Chain of Custody Record

Lab Job #: 500-120747
Chain of Custody Number: EE46-03
Page _____ of _____
Temperature °C of Cooler: 39.30

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
EE		1009008 0016-01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Date		Time		# of Containers		Matrix	
I 74		50012744									
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix	
Rock Island County, IL		50012744									
Sampler		Lab PM		Date		Time		# of Containers		Matrix	
J. Cooper		D. Wright									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SUOC	total HCL metals	total 15 ppb IAC metals	ppt/g solids
1		1314V3-01-B43(0-2)	11-29-16	0845	2	S	X	X	X	X	X
2		1314V3-01-B42(0-2)	11-29-16	0855	2	S	X	X	X	X	X
3		1314V3-01-B41(0-2)	11-29-16	0905	2	S	X	X	X	X	X
4		1314V3-01-B40(0-2)	11-29-16	0915	2	S	X	X	X	X	X
5		1314V3-01-B37(0-2)	11-29-16	0945	2	S	X	X	X	X	X
6		1314V3-01-B19(0-5)	11-29-16	1325	2	S	X	X	X	X	X
7		1314V3-01-B18(0-7)	11-29-16	1345	2	S	X	X	X	X	X
8		1314V3-01-B17(0-7)	11-29-16	1405	2	S	X	X	X	X	X
9		1314V3-01-B16(0-6)	11-29-16	1420	2	S	X	X	X	X	X
10		1314V3-01-B15(0-7)	11-29-16	1500	2	S	X	X	X	X	X

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

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

Relinquished By <u>[Signature]</u>	Company EE	Date 11-29-16	Time 1715	Received By <u>[Signature]</u>	Company TA-CHE	Date 11/30/16	Time 1020
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
 Shipped: FedEx
 Hand Delivered: _____

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

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Report To _____ (optional)	Bill To _____ (optional)
Contact: _____	Contact: _____
Company: _____	Company: _____
Address: _____	Address: _____
Address: _____	Address: _____
Phone: _____	Phone: _____
Fax: _____	Fax: _____
E-Mail: _____	PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-120747

Chain of Custody Number: EE 46-07

Page _____ of _____

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter										Preservative Key	
EE		1009006-0046-01														1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix								Comments	
I 74		50012744		Date Time		Matrix											
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix							
Rock Island County, IL		50012744		11-29-16		1505		25		VCL							
Sampler		Lab PM		Date		Time		# of Containers		Matrix							
S-Cooper		D-wright		11-29-16		1525		25		SVCL							
Lab ID		MS/MSD		Date		Time		# of Containers		Matrix							
11		1314V3-01-1315 (7-13)		11-29-16		1505		25		VCL						64026	
12		1314V3-01-1314 (0-6)		11-29-16		1525		25		SVCL							
13		1314V3-01-1314 (6-12)		11-29-16		1530		25		VCL							
14		1314V3-01-1312 (0-6)		11-29-16		1610		25		VCL							
15		1314V3-01-1312 (6-11)		11-29-16		1615		25		VCL							
16		1314V3-01-1311 (0-5)		11-29-16		1630		25		VCL							
17		1314V3-01-1322 (0-7)		11-29-16		1655		25		VCL							

Turnaround Time Required (Business Days) _____
 Requested Due Date _____

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

Relinquished By: <u>[Signature]</u>	Company: <u>EE</u>	Date: <u>11-29-16</u>	Time: <u>1715</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CRIT</u>	Date: <u>11/30/16</u>	Time: <u>1020</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: _____

Shipped: FEDEX

Hand Delivered: _____

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

Client Comments:

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120747-1

Login Number: 120747

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9,3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120747-1

Login Number: 120747

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9,3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-120795-1
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
12/14/2016 4:02:37 PM
Jodie Bracken, Project Management Assistant II
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Designee for
Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
TotalAccess

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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	12
Client Sample Results	13
Definitions	53
QC Association	54
Surrogate Summary	61
QC Sample Results	62
Chronicle	79
Certification Summary	88
Chain of Custody	89
Receipt Checklists	90

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Job ID: 500-120795-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120795-1

Comments

No additional comments.

Receipt

The samples were received on 12/1/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-120795-E-1-K MS) and (500-120795-E-1-L MSD)

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

Metals

Method(s) 6010B: The laboratory blank for preparation batch 500-363481 and 500-363611 contained Boron above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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

General Chemistry

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

Organic Prep

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B38 (0-4)

Lab Sample ID: 500-120795-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0098	J F1 F2	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.028	J F1 F2	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.034	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.021	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	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	0.024	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.5		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	80		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	21000		11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.5		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	630		26	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.26	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	1500		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.85		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.079	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.46		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.059	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B39 (0-4)

Lab Sample ID: 500-120795-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.5		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	82		0.50	0.092	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	2300		10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.50	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.8		0.25	0.057	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 - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B39 (0-4) (Continued)

Lab Sample ID: 500-120795-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	14		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.25	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.50	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	25		0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	590		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Sodium	750		50	6.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.41	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.024		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

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

Client Sample ID: 1314V3-01-B21 (0-6)

Lab Sample ID: 500-120795-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	4.6		0.53	0.25	mg/Kg	1	☼		6010B	Total/NA
Barium	45		0.53	0.098	mg/Kg	1	☼		6010B	Total/NA
Beryllium	0.47		0.21	0.046	mg/Kg	1	☼		6010B	Total/NA
Boron	3.9		2.7	0.37	mg/Kg	1	☼		6010B	Total/NA
Cadmium	0.19		0.11	0.031	mg/Kg	1	☼		6010B	Total/NA
Calcium	67000		110	34	mg/Kg	10	☼		6010B	Total/NA
Chromium	12	B	0.53	0.092	mg/Kg	1	☼		6010B	Total/NA
Cobalt	7.8		0.27	0.060	mg/Kg	1	☼		6010B	Total/NA
Copper	13		0.53	0.12	mg/Kg	1	☼		6010B	Total/NA
Iron	13000	B	11	4.1	mg/Kg	1	☼		6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼		6010B	Total/NA
Magnesium	21000		5.3	2.2	mg/Kg	1	☼		6010B	Total/NA
Manganese	300		0.53	0.11	mg/Kg	1	☼		6010B	Total/NA
Nickel	19		0.53	0.14	mg/Kg	1	☼		6010B	Total/NA
Potassium	850		27	4.4	mg/Kg	1	☼		6010B	Total/NA
Selenium	0.41	J	0.53	0.26	mg/Kg	1	☼		6010B	Total/NA
Sodium	440		53	7.0	mg/Kg	1	☼		6010B	Total/NA
Vanadium	18		0.27	0.078	mg/Kg	1	☼		6010B	Total/NA
Zinc	41		1.1	0.34	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 - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B21 (0-6) (Continued)

Lab Sample ID: 500-120795-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.96		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.055		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.024	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.023	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.72		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.017	0.0088	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B25 (0-8.2)

Lab Sample ID: 500-120795-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.019	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.019	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.011	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.011	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.013	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0091	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	33000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.9		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	9.6		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	110		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	37		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.82		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	5.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.032	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.034		0.017	0.0089	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B26 (0-2)

Lab Sample ID: 500-120795-8

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B26 (0-2) (Continued)

Lab Sample ID: 500-120795-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.012	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.016	J	0.036	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.021	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.35		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.080		0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.75		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.61		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.34		0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.37		0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.096	J	0.18	0.066	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.58		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.22		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.39		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.18		0.036	0.0093	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.037		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.15		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		0.45	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	71		0.45	0.082	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.18	0.039	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7		2.2	0.31	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.090	0.026	mg/Kg	1	☼	6010B	Total/NA
Calcium	21000		9.0	2.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	26	B	0.45	0.077	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.45	0.097	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B	9.0	3.5	mg/Kg	1	☼	6010B	Total/NA
Lead	38		0.22	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8900		4.5	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	430		0.45	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	27		0.45	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	940		22	3.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.29	J	0.45	0.22	mg/Kg	1	☼	6010B	Total/NA
Sodium	380		45	5.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.22	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	63		0.90	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	0.69		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.058	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.64		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B24 (0-4.5)

Lab Sample ID: 500-120795-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.020	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.041		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.034	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.019	J	0.037	0.0050	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 - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B24 (0-4.5) (Continued)

Lab Sample ID: 500-120795-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.021	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.027	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.011	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.020	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.8		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	66		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.22	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	3.1		2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	20000		11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.55	0.094	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.27	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9400		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	810		27	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	130		55	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.27	0.080	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.066	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.82		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.023	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.020	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.016	0.0085	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B23 (0-8)

Lab Sample ID: 500-120795-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.4		0.52	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	66		0.52	0.096	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.21	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	3.0		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000		100	34	mg/Kg	10	☼	6010B	Total/NA
Chromium	11	B	0.52	0.090	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.7		0.26	0.059	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	8.3		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.2	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	240		0.52	0.10	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 - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B23 (0-8) (Continued)

Lab Sample ID: 500-120795-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Nickel	13		0.52	0.14	mg/Kg	1		☼	6010B	Total/NA
Potassium	690		26	4.3	mg/Kg	1		☼	6010B	Total/NA
Sodium	210		52	6.9	mg/Kg	1		☼	6010B	Total/NA
Vanadium	15		0.26	0.076	mg/Kg	1		☼	6010B	Total/NA
Zinc	32		1.0	0.33	mg/Kg	1		☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.052	J B	0.50	0.050	mg/L	1			6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1			6010B	TCLP
Mercury	0.012	J	0.019	0.0097	mg/Kg	1		☼	7471B	Total/NA
pH	7.9		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120795-1	1314V3-01-B38 (0-4)	Solid	11/30/16 07:55	12/01/16 09:25
500-120795-2	1314V3-01-B39 (0-4)	Solid	11/30/16 08:15	12/01/16 09:25
500-120795-6	1314V3-01-B21 (0-6)	Solid	11/30/16 11:05	12/01/16 09:25
500-120795-7	1314V3-01-B25 (0-8.2)	Solid	11/30/16 12:25	12/01/16 09:25
500-120795-8	1314V3-01-B26 (0-2)	Solid	11/30/16 12:50	12/01/16 09:25
500-120795-9	1314V3-01-B24 (0-4.5)	Solid	11/30/16 13:15	12/01/16 09:25
500-120795-10	1314V3-01-B23 (0-8)	Solid	11/30/16 13:35	12/01/16 09:25



Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B38 (0-4)

Lab Sample ID: 500-120795-1

Date Collected: 11/30/16 07:55

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/02/16 22:23	1
Dibromofluoromethane	100		75 - 120	12/01/16 16:55	12/02/16 22:23	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/02/16 22:23	1
Toluene-d8 (Surr)	99		75 - 123	12/01/16 16:55	12/02/16 22:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Bis(2-chloroethyl)ether	<0.20	F1	0.20	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
1,3-Dichlorobenzene	<0.20	F1	0.20	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B38 (0-4)

Lab Sample ID: 500-120795-1

Date Collected: 11/30/16 07:55

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20	F1 F2	0.20	0.047	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
N-Nitrosodi-n-propylamine	<0.079	F1 F2	0.079	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachloroethane	<0.20	F1 F2	0.20	0.060	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Chloroaniline	<0.79	F1	0.79	0.18	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4,6-Trichlorophenol	<0.39	F1	0.39	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4,5-Trichlorophenol	<0.39	F1	0.39	0.090	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachlorocyclopentadiene	<0.79	F1	0.79	0.23	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Methylnaphthalene	<0.079	F1 F2	0.079	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
3-Nitroaniline	<0.39	F2	0.39	0.12	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dinitrotoluene	<0.20	F1 F2	0.20	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Acenaphthene	<0.039	F1 F2	0.039	0.0071	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Dibenzofuran	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Fluorene	<0.039	F1 F2	0.039	0.0055	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Bromophenyl phenyl ether	<0.20	F1 F2	0.20	0.052	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachlorobenzene	<0.079	F1 F2	0.079	0.0091	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Diethyl phthalate	<0.20	F1 F2	0.20	0.067	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Chlorophenyl phenyl ether	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
N-Nitrosodiphenylamine	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4,6-Dinitro-2-methylphenol	<0.79	F2	0.79	0.32	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Phenanthrene	0.0098	J F1 F2	0.039	0.0055	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Anthracene	<0.039	F1 F2	0.039	0.0066	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Carbazole	<0.20	F2	0.20	0.098	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Di-n-butyl phthalate	<0.20	F2	0.20	0.060	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Fluoranthene	0.028	J F1 F2	0.039	0.0073	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Pyrene	0.034	J	0.039	0.0078	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Benzo[a]anthracene	0.021	J	0.039	0.0053	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B38 (0-4)

Lab Sample ID: 500-120795-1

Date Collected: 11/30/16 07:55

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.021	J	0.039	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
3,3'-Dichlorobenzidine	<0.20	F2	0.20	0.055	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Di-n-octyl phthalate	<0.20	F2	0.20	0.064	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Benzo[b]fluoranthene	0.033	J	0.039	0.0085	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Benzo[a]pyrene	0.024	J	0.039	0.0076	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Indeno[1,2,3-cd]pyrene	0.021	J	0.039	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Benzo[g,h,i]perylene	0.022	J	0.039	0.013	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
3 & 4 Methylphenol	<0.20	F1	0.20	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		40 - 130	12/08/16 07:31	12/09/16 20:28	1
Phenol-d5	90		36 - 123	12/08/16 07:31	12/09/16 20:28	1
Nitrobenzene-d5	79		33 - 124	12/08/16 07:31	12/09/16 20:28	1
2-Fluorobiphenyl	83		42 - 115	12/08/16 07:31	12/09/16 20:28	1
2,4,6-Tribromophenol	64		25 - 130	12/08/16 07:31	12/09/16 20:28	1
Terphenyl-d14	84		25 - 150	12/08/16 07:31	12/09/16 20:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Arsenic	4.5		0.53	0.24	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Barium	80		0.53	0.097	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Beryllium	0.44		0.21	0.046	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Boron	2.7		2.6	0.37	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Cadmium	0.17		0.11	0.031	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Calcium	21000		11	3.4	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Chromium	12	B	0.53	0.091	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Cobalt	6.5		0.26	0.060	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Copper	12		0.53	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Iron	12000	B	11	4.1	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Lead	14		0.26	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Magnesium	11000		5.3	2.1	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Manganese	250		0.53	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Nickel	16		0.53	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Potassium	630		26	4.3	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Selenium	0.26	J	0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Sodium	1500		53	7.0	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Vanadium	22		0.26	0.077	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Zinc	43		1.1	0.33	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.85		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 18:10	1
Boron	0.079	J B	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:10	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B38 (0-4)

Lab Sample ID: 500-120795-1

Date Collected: 11/30/16 07:55

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0025	J	0.0050	0.0020	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Manganese	0.46		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Nickel	0.011	J	0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Selenium	0.021	J	0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Zinc	0.059	J B	0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.6		0.025	0.010	mg/L	-	12/06/16 08:03	12/07/16 23:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 10:49	12/06/16 17:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:09	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.017	0.0091	mg/Kg	☼	12/02/16 14:45	12/05/16 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU	-		12/02/16 20:06	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B39 (0-4)

Lab Sample ID: 500-120795-2

Date Collected: 11/30/16 08:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Carbon disulfide	<0.0046		0.0046	0.00097	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/01/16 16:55	12/02/16 22:47	1
Dibromofluoromethane	97		75 - 120	12/01/16 16:55	12/02/16 22:47	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/01/16 16:55	12/02/16 22:47	1
Toluene-d8 (Surr)	100		75 - 123	12/01/16 16:55	12/02/16 22:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B39 (0-4)

Lab Sample ID: 500-120795-2

Date Collected: 11/30/16 08:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B39 (0-4)

Lab Sample ID: 500-120795-2

Date Collected: 11/30/16 08:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/08/16 07:31	12/09/16 22:25	1
Phenol-d5	80		36 - 123	12/08/16 07:31	12/09/16 22:25	1
Nitrobenzene-d5	68		33 - 124	12/08/16 07:31	12/09/16 22:25	1
2-Fluorobiphenyl	73		42 - 115	12/08/16 07:31	12/09/16 22:25	1
2,4,6-Tribromophenol	67		25 - 130	12/08/16 07:31	12/09/16 22:25	1
Terphenyl-d14	78		25 - 150	12/08/16 07:31	12/09/16 22:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Arsenic	5.5		0.50	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Barium	82		0.50	0.092	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Beryllium	0.45		0.20	0.044	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Boron	1.8 J		2.5	0.35	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Cadmium	0.20		0.10	0.029	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Calcium	2300		10	3.2	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Chromium	13 B		0.50	0.087	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Cobalt	9.8		0.25	0.057	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Copper	14		0.50	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Iron	14000 B		10	3.9	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Lead	12		0.25	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Magnesium	1800		5.0	2.0	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Manganese	440		0.50	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Nickel	25		0.50	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Potassium	590		25	4.1	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Selenium	<0.50		0.50	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Sodium	750		50	6.7	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Vanadium	25		0.25	0.074	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Zinc	57		1.0	0.32	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.41 J		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 18:15	1
Boron	<0.50		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B39 (0-4)

Lab Sample ID: 500-120795-2

Date Collected: 11/30/16 08:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 18:15	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:15	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:15	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 18:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 18:15	1
Manganese	0.018	J	0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:15	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:15	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 18:15	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:15	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 10:49	12/05/16 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:12	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0095	mg/Kg	☼	12/02/16 14:45	12/05/16 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 20:13	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B21 (0-6)

Lab Sample ID: 500-120795-6

Date Collected: 11/30/16 11:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/01/16 16:55	12/03/16 12:54	1
Dibromofluoromethane	102		75 - 120	12/01/16 16:55	12/03/16 12:54	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/01/16 16:55	12/03/16 12:54	1
Toluene-d8 (Surr)	99		75 - 123	12/01/16 16:55	12/03/16 12:54	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	☼	12/08/16 07:31	12/09/16 23:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B21 (0-6)

Lab Sample ID: 500-120795-6

Date Collected: 11/30/16 11:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B21 (0-6)

Lab Sample ID: 500-120795-6

Date Collected: 11/30/16 11:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/08/16 07:31	12/09/16 23:23	1
Phenol-d5	88		36 - 123	12/08/16 07:31	12/09/16 23:23	1
Nitrobenzene-d5	77		33 - 124	12/08/16 07:31	12/09/16 23:23	1
2-Fluorobiphenyl	81		42 - 115	12/08/16 07:31	12/09/16 23:23	1
2,4,6-Tribromophenol	53		25 - 130	12/08/16 07:31	12/09/16 23:23	1
Terphenyl-d14	84		25 - 150	12/08/16 07:31	12/09/16 23:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Arsenic	4.6		0.53	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Barium	45		0.53	0.098	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Beryllium	0.47		0.21	0.046	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Boron	3.9		2.7	0.37	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Cadmium	0.19		0.11	0.031	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Calcium	67000		110	34	mg/Kg	☼	12/05/16 08:55	12/06/16 13:33	10
Chromium	12 B		0.53	0.092	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Cobalt	7.8		0.27	0.060	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Copper	13		0.53	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Iron	13000 B		11	4.1	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Lead	11		0.27	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Magnesium	21000		5.3	2.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Manganese	300		0.53	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Nickel	19		0.53	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Potassium	850		27	4.4	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Selenium	0.41 J		0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Sodium	440		53	7.0	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Vanadium	18		0.27	0.078	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Zinc	41		1.1	0.34	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:00	1
Boron	0.073 J B		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:00	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B21 (0-6)

Lab Sample ID: 500-120795-6

Date Collected: 11/30/16 11:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 19:00	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 19:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 19:00	1
Manganese	0.96		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
Nickel	0.055		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
Selenium	0.024 J		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 19:00	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
Zinc	0.023 J B		0.50	0.020	mg/L		12/05/16 10:49	12/05/16 19:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.72		0.025	0.010	mg/L		12/06/16 08:03	12/07/16 23:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:43	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.017	0.0088	mg/Kg	☼	12/02/16 14:45	12/05/16 12:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/02/16 20:41	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B25 (0-8.2)

Lab Sample ID: 500-120795-7

Date Collected: 11/30/16 12:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 84.9

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	☼	12/01/16 16:55	12/03/16 13:19	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/03/16 13:19	1
Dibromofluoromethane	101		75 - 120	12/01/16 16:55	12/03/16 13:19	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/03/16 13:19	1
Toluene-d8 (Surr)	100		75 - 123	12/01/16 16:55	12/03/16 13:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B25 (0-8.2)

Lab Sample ID: 500-120795-7

Date Collected: 11/30/16 12:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Phenanthrene	0.019	J	0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Fluoranthene	0.019	J	0.037	0.0069	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Pyrene	0.019	J	0.037	0.0074	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Benzo[a]anthracene	0.011	J	0.037	0.0050	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B25 (0-8.2)

Lab Sample ID: 500-120795-7

Date Collected: 11/30/16 12:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.011	J	0.037	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Benzo[b]fluoranthene	0.013	J	0.037	0.0080	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Benzo[a]pyrene	0.0091	J	0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	113		40 - 130				12/08/16 07:31	12/09/16 23:52	1
Phenol-d5	104		36 - 123				12/08/16 07:31	12/09/16 23:52	1
Nitrobenzene-d5	86		33 - 124				12/08/16 07:31	12/09/16 23:52	1
2-Fluorobiphenyl	93		42 - 115				12/08/16 07:31	12/09/16 23:52	1
2,4,6-Tribromophenol	61		25 - 130				12/08/16 07:31	12/09/16 23:52	1
Terphenyl-d14	92		25 - 150				12/08/16 07:31	12/09/16 23:52	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Arsenic	5.3		0.55	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Barium	31		0.55	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Beryllium	0.46		0.22	0.048	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Boron	2.7	J	2.8	0.39	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Cadmium	0.14		0.11	0.032	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Calcium	33000		11	3.6	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Chromium	11	B	0.55	0.095	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Cobalt	7.9		0.28	0.063	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Copper	12		0.55	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Iron	14000	B	11	4.3	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Lead	9.6		0.28	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Magnesium	17000		5.5	2.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Manganese	370		0.55	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Nickel	17		0.55	0.15	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Potassium	770		28	4.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Sodium	110		55	7.3	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Vanadium	17		0.28	0.081	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Zinc	37		1.1	0.35	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.82		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:05	1
Boron	0.059	J B	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:05	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B25 (0-8.2)

Lab Sample ID: 500-120795-7

Date Collected: 11/30/16 12:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Cobalt	0.023	J	0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Manganese	5.2		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Nickel	0.034		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Zinc	0.032	J B	0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.14		0.025	0.010	mg/L	-	12/06/16 08:03	12/07/16 23:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 10:49	12/06/16 17:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:46	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.017	0.0089	mg/Kg	☼	12/02/16 14:45	12/05/16 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU	-		12/02/16 20:48	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B26 (0-2)

Lab Sample ID: 500-120795-8

Date Collected: 11/30/16 12:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 90.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0084	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/03/16 13:44	1
Dibromofluoromethane	98		75 - 120	12/01/16 16:55	12/03/16 13:44	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/03/16 13:44	1
Toluene-d8 (Surr)	99		75 - 123	12/01/16 16:55	12/03/16 13:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B26 (0-2)

Lab Sample ID: 500-120795-8

Date Collected: 11/30/16 12:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 90.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dinitrophenol	<0.73		0.73	0.63	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Acenaphthylene	0.012	J	0.036	0.0048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Acenaphthene	0.016	J	0.036	0.0065	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Fluorene	0.021	J	0.036	0.0051	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Phenanthrene	0.35		0.036	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Anthracene	0.080		0.036	0.0060	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Fluoranthene	0.75		0.036	0.0067	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Pyrene	0.61		0.036	0.0072	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Benzo[a]anthracene	0.34		0.036	0.0048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B26 (0-2)

Lab Sample ID: 500-120795-8

Date Collected: 11/30/16 12:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 90.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.37		0.036	0.0098	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Bis(2-ethylhexyl) phthalate	0.096	J	0.18	0.066	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Benzo[b]fluoranthene	0.58		0.036	0.0078	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Benzo[k]fluoranthene	0.22		0.036	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Benzo[a]pyrene	0.39		0.036	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Indeno[1,2,3-cd]pyrene	0.18		0.036	0.0093	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Dibenz(a,h)anthracene	0.037		0.036	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Benzo[g,h,i]perylene	0.15		0.036	0.012	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		40 - 130				12/08/16 07:31	12/10/16 02:18	1
Phenol-d5	87		36 - 123				12/08/16 07:31	12/10/16 02:18	1
Nitrobenzene-d5	73		33 - 124				12/08/16 07:31	12/10/16 02:18	1
2-Fluorobiphenyl	100		42 - 115				12/08/16 07:31	12/10/16 02:18	1
2,4,6-Tribromophenol	79		25 - 130				12/08/16 07:31	12/10/16 02:18	1
Terphenyl-d14	90		25 - 150				12/08/16 07:31	12/10/16 02:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.90		0.90	0.19	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Arsenic	3.6		0.45	0.21	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Barium	71		0.45	0.082	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Beryllium	0.53		0.18	0.039	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Boron	3.7		2.2	0.31	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Cadmium	0.22		0.090	0.026	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Calcium	21000		9.0	2.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Chromium	26	B	0.45	0.077	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Cobalt	10		0.22	0.051	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Copper	20		0.45	0.097	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Iron	15000	B	9.0	3.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Lead	38		0.22	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Magnesium	8900		4.5	1.8	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Manganese	430		0.45	0.089	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Nickel	27		0.45	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Potassium	940		22	3.7	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Selenium	0.29	J	0.45	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Silver	<0.22		0.22	0.053	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Sodium	380		45	5.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Thallium	<0.45		0.45	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Vanadium	25		0.22	0.066	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Zinc	63		0.90	0.28	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.69		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:09	1
Boron	0.058	J B	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:09	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B26 (0-2)

Lab Sample ID: 500-120795-8

Date Collected: 11/30/16 12:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 90.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 19:09	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 19:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 19:09	1
Manganese	0.24		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 19:09	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Zinc	0.023	J B	0.50	0.020	mg/L		12/05/16 10:49	12/05/16 19:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.64		0.025	0.010	mg/L		12/06/16 08:03	12/07/16 23:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:50	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018	0.0094	mg/Kg	☼	12/02/16 14:45	12/05/16 12:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			12/02/16 20:55	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B24 (0-4.5)

Lab Sample ID: 500-120795-9

Date Collected: 11/30/16 13:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/03/16 14:09	1
Dibromofluoromethane	99		75 - 120	12/01/16 16:55	12/03/16 14:09	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/03/16 14:09	1
Toluene-d8 (Surr)	100		75 - 123	12/01/16 16:55	12/03/16 14:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B24 (0-4.5)

Lab Sample ID: 500-120795-9

Date Collected: 11/30/16 13:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Phenanthrene	0.020	J	0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Fluoranthene	0.041		0.037	0.0069	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Pyrene	0.034	J	0.037	0.0074	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Benzo[a]anthracene	0.019	J	0.037	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B24 (0-4.5)

Lab Sample ID: 500-120795-9

Date Collected: 11/30/16 13:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.021	J	0.037	0.010	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Benzo[b]fluoranthene	0.027	J	0.037	0.0080	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Benzo[k]fluoranthene	0.011	J	0.037	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Benzo[a]pyrene	0.020	J	0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Indeno[1,2,3-cd]pyrene	0.012	J	0.037	0.0096	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130				12/08/16 07:31	12/10/16 00:22	1
Phenol-d5	88		36 - 123				12/08/16 07:31	12/10/16 00:22	1
Nitrobenzene-d5	91		33 - 124				12/08/16 07:31	12/10/16 00:22	1
2-Fluorobiphenyl	92		42 - 115				12/08/16 07:31	12/10/16 00:22	1
2,4,6-Tribromophenol	59		25 - 130				12/08/16 07:31	12/10/16 00:22	1
Terphenyl-d14	78		25 - 150				12/08/16 07:31	12/10/16 00:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Arsenic	3.8		0.55	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Barium	66		0.55	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Beryllium	0.54		0.22	0.047	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Boron	3.1		2.7	0.38	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Cadmium	0.20		0.11	0.032	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Calcium	20000		11	3.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Chromium	15	B	0.55	0.094	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Cobalt	11		0.27	0.062	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Copper	15		0.55	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Iron	14000	B	11	4.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Lead	21		0.27	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Magnesium	9400		5.5	2.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Manganese	340		0.55	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Nickel	20		0.55	0.15	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Potassium	810		27	4.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Sodium	130		55	7.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Vanadium	24		0.27	0.080	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Zinc	51		1.1	0.35	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.77		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:14	1
Boron	0.066	J B	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:14	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B24 (0-4.5)

Lab Sample ID: 500-120795-9

Date Collected: 11/30/16 13:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0024	J	0.0050	0.0020	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Manganese	0.82		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Nickel	0.010	J	0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Selenium	0.023	J	0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Zinc	0.020	J B	0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.20		0.025	0.010	mg/L	-	12/06/16 08:03	12/07/16 23:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 10:49	12/06/16 17:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.016	0.0085	mg/Kg	☼	12/02/16 14:45	12/05/16 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU	-		12/02/16 21:03	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B23 (0-8)

Lab Sample ID: 500-120795-10

Date Collected: 11/30/16 13:35

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/01/16 16:55	12/03/16 14:33	1
Dibromofluoromethane	102		75 - 120	12/01/16 16:55	12/03/16 14:33	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/01/16 16:55	12/03/16 14:33	1
Toluene-d8 (Surr)	98		75 - 123	12/01/16 16:55	12/03/16 14:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B23 (0-8)

Lab Sample ID: 500-120795-10

Date Collected: 11/30/16 13:35

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Methylnaphthalene	<0.072		0.072	0.0065	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachlorobenzene	<0.072		0.072	0.0082	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Phenanthrene	<0.035		0.035	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Fluoranthene	<0.035		0.035	0.0066	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Pyrene	<0.035		0.035	0.0071	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[a]anthracene	<0.035		0.035	0.0048	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B23 (0-8)

Lab Sample ID: 500-120795-10

Date Collected: 11/30/16 13:35

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.035		0.035	0.0097	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[b]fluoranthene	<0.035		0.035	0.0077	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[a]pyrene	<0.035		0.035	0.0069	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/08/16 07:31	12/10/16 00:51	1
Phenol-d5	88		36 - 123	12/08/16 07:31	12/10/16 00:51	1
Nitrobenzene-d5	75		33 - 124	12/08/16 07:31	12/10/16 00:51	1
2-Fluorobiphenyl	80		42 - 115	12/08/16 07:31	12/10/16 00:51	1
2,4,6-Tribromophenol	66		25 - 130	12/08/16 07:31	12/10/16 00:51	1
Terphenyl-d14	78		25 - 150	12/08/16 07:31	12/10/16 00:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Arsenic	2.4		0.52	0.24	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Barium	66		0.52	0.096	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Beryllium	0.43		0.21	0.045	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Boron	3.0		2.6	0.37	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Cadmium	0.14		0.10	0.030	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Calcium	58000		100	34	mg/Kg	☼	12/05/16 08:55	12/06/16 13:37	10
Chromium	11 B		0.52	0.090	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Cobalt	5.7		0.26	0.059	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Copper	10		0.52	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Iron	10000 B		10	4.0	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Lead	8.3		0.26	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Magnesium	18000		5.2	2.1	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Manganese	240		0.52	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Nickel	13		0.52	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Potassium	690		26	4.3	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Selenium	<0.52		0.52	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Sodium	210		52	6.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Vanadium	15		0.26	0.076	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Zinc	32		1.0	0.33	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.43 J		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:19	1
Boron	0.052 J B		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:19	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Client Sample ID: 1314V3-01-B23 (0-8)

Lab Sample ID: 500-120795-10

Date Collected: 11/30/16 13:35

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 19:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 19:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 19:19	1
Manganese	1.5		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Nickel	0.016	J	0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 19:19	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 10:49	12/05/16 19:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 08:03	12/08/16 00:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:57	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.019	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 13:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/16 21:10	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


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

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


Chain of Custody Record

Lab Job #: 500-120795
 Chain of Custody Number: ES46-08
 Page _____ of _____
 Temperature °C of Cooler: 4.8-7.45

Client		Client Project #		Preservative							Preservative Key	
EE		1009008-004601									 14° 4° 8° to 4°	
Project Name		Lab Project #		Parameter							500-120795 COC	
I74		50012744		VOC								
Project Location/State		Lab Project #		Parameter								
Pelee Island County, IL		50012744		SUC								
Sampler		Lab PM		Parameter								
S. Cooper		D. Wright		TOL TRK								
TMM				FROM TRK								
LUMIN2				P.105 (M) Ad								
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix						Comments
1		1314V3-01-1338 (0-4)	11-30-16	0755	2 S	S	X	X	X	X	X	64E26
2		1314V3-01-1339 (0-4)	11-30-16	0815	2 S	S	X	X	X	X	X	
3		1314V3-01-1332 (0-6)	11-30-16	0950	2 S	S	X	X	X	X	X	
4		1314V3-01-1333 (0-2.5)	11-30-16	1005	2 S	S	X	X	X	X	X	
5		1314V3-01-1329 (0-5)	11-30-16	1025	2 S	S	X	X	X	X	X	
6		1314V3-01-1321 (0-6)	11-30-16	1105	2 S	S	X	X	X	X	X	
7		1314V3-01-1325 (0-8.2)	11-30-16	1225	2 S	S	X	X	X	X	X	
8		1314V3-01-1326 (0-2)	11-30-16	1250	2 S	S	X	X	X	X	X	
9		1314V3-01-1324 (0-4.5)	11-30-16	1315	2 S	S	X	X	X	X	X	
10		1314V3-01-1323 (0-8)	11-30-16	1335	2 S	S	X	X	X	X	X	

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

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

Relinquished By 	Company EE	Date 11-30-16	Time 1730	Received By Deirdre Soud	Company TAMT	Date 12/01/16	Time 0925	Lab Courier
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped FX Priority
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

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

Client Comments: _____

Lab Comments: _____



Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120795-1

Login Number: 120795

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120795-1

Login Number: 120795

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-120882-6
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
12/16/2016 5:09:25 PM
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Designee for
Richard Wright, Senior Project Manager
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LINKS

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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



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Sample Summary	7
Client Sample Results	8
Definitions	20
Certification Summary	21
Chain of Custody	22
Receipt Checklists	23

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Job ID: 500-120882-6

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-120882-6**

Comments

No additional comments.

Receipt

The samples were received on 12/2/2016 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.6° C and 3.3° C.

GC/MS VOA

Method(s) 8260B: The method blank for preparation batch 363745 contained 2-Hexanone above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-analysis of samples were not performed.

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

GC/MS Semi VOA

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

Metals

Method(s) 6020A: The internal standard (Tb) was used to report the element Thallium in batch 500-364154. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

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 - I-74 - WO 046

TestAmerica Job ID: 500-120882-6



Client Sample ID: 1314V3-01-B31 (0-6)

Lab Sample ID: 500-120882-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.011	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA	
Fluoranthene	0.020	J	0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA	
Pyrene	0.020	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]anthracene	0.0096	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA	
Chrysene	0.010	J	0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA	
Benzo[b]fluoranthene	0.021	J	0.036	0.0077	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]pyrene	0.011	J	0.036	0.0069	mg/Kg	1	☼	8270D	Total/NA	
Antimony	0.29	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA	
Arsenic	6.1		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA	
Barium	38		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.46		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA	
Boron	3.9		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA	
Cadmium	0.25		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA	
Calcium	40000		11	3.6	mg/Kg	1	☼	6010B	Total/NA	
Chromium	11	B	0.56	0.097	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 - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B31 (0-6) (Continued)

Lab Sample ID: 500-120882-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	6.6		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	6.7		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14	B	0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	1000		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.94		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.59		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B20 (0-6)

Lab Sample ID: 500-120882-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0087	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	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	0.0098	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.011	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.022	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.011	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.37	J	0.90	0.19	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.2		0.45	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	71		0.45	0.082	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.18	0.039	mg/Kg	1	☼	6010B	Total/NA
Boron	3.0		2.2	0.31	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35		0.090	0.026	mg/Kg	1	☼	6010B	Total/NA
Calcium	22000		9.0	2.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.45	0.077	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.45	0.097	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		9.0	3.5	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.22	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		4.5	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.45	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	13	B	0.45	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		22	3.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		45	5.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.93		0.45	0.22	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 - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B20 (0-6) (Continued)

Lab Sample ID: 500-120882-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	18		0.22	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		0.90	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.44		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.016	0.0086	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120882-15	1314V3-01-B31 (0-6)	Solid	12/01/16 16:20	12/02/16 10:10
500-120882-16	1314V3-01-B20 (0-6)	Solid	12/01/16 16:45	12/02/16 10:10

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B31 (0-6)

Lab Sample ID: 500-120882-15

Date Collected: 12/01/16 16:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/02/16 16:10	12/06/16 19:31	1
Dibromofluoromethane	97		75 - 120	12/02/16 16:10	12/06/16 19:31	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/02/16 16:10	12/06/16 19:31	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 16:10	12/06/16 19:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B31 (0-6)

Lab Sample ID: 500-120882-15

Date Collected: 12/01/16 16:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Phenanthrene	0.011	J	0.036	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Fluoranthene	0.020	J	0.036	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Pyrene	0.020	J	0.036	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Benzo[a]anthracene	0.0096	J	0.036	0.0048	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B31 (0-6)

Lab Sample ID: 500-120882-15

Date Collected: 12/01/16 16:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.010	J	0.036	0.0098	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Benzo[b]fluoranthene	0.021	J	0.036	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Benzo[a]pyrene	0.011	J	0.036	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0093	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		40 - 130	12/10/16 09:29	12/14/16 07:13	1
Phenol-d5	89		36 - 123	12/10/16 09:29	12/14/16 07:13	1
Nitrobenzene-d5	79		33 - 124	12/10/16 09:29	12/14/16 07:13	1
2-Fluorobiphenyl	70		42 - 115	12/10/16 09:29	12/14/16 07:13	1
2,4,6-Tribromophenol	28		25 - 130	12/10/16 09:29	12/14/16 07:13	1
Terphenyl-d14	83		25 - 150	12/10/16 09:29	12/14/16 07:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.1	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Arsenic	6.1		0.56	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Barium	38		0.56	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Beryllium	0.46		0.23	0.049	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Boron	3.9		2.8	0.39	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Cadmium	0.25		0.11	0.033	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Calcium	40000		11	3.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Chromium	11	B	0.56	0.097	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Cobalt	6.6		0.28	0.064	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Copper	11		0.56	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Iron	14000		11	4.3	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Lead	6.7		0.28	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Magnesium	21000		5.6	2.3	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Manganese	440		0.56	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Nickel	14	B	0.56	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Potassium	1300		28	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Sodium	1000		56	7.4	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Thallium	0.94		0.56	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Vanadium	17		0.28	0.082	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Zinc	28		1.1	0.36	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:33	1
Boron	0.053	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:33	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B31 (0-6)

Lab Sample ID: 500-120882-15

Date Collected: 12/01/16 16:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0022	J	0.0050	0.0020	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Manganese	2.5		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Nickel	0.028		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Zinc	0.023	J B	0.50	0.020	mg/L	-	12/06/16 14:16	12/07/16 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.59		0.025	0.010	mg/L	-	12/06/16 14:13	12/07/16 21:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:16	12/07/16 20:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:16	12/07/16 20:16	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 10:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.018	0.0095	mg/Kg	☼	12/05/16 14:30	12/06/16 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU	-		12/06/16 15:41	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B20 (0-6)

Lab Sample ID: 500-120882-16

Date Collected: 12/01/16 16:45

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/02/16 16:10	12/06/16 19:55	1
Dibromofluoromethane	99		75 - 120	12/02/16 16:10	12/06/16 19:55	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/02/16 16:10	12/06/16 19:55	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 16:10	12/06/16 19:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B20 (0-6)

Lab Sample ID: 500-120882-16

Date Collected: 12/01/16 16:45

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Phenanthrene	0.0087	J	0.037	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Fluoranthene	0.020	J	0.037	0.0070	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Pyrene	0.018	J	0.037	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Benzo[a]anthracene	0.0098	J	0.037	0.0051	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B20 (0-6)

Lab Sample ID: 500-120882-16

Date Collected: 12/01/16 16:45

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.011	J	0.037	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Benzo[b]fluoranthene	0.022	J	0.037	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Benzo[a]pyrene	0.011	J	0.037	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		40 - 130	12/10/16 09:29	12/14/16 07:39	1
Phenol-d5	99		36 - 123	12/10/16 09:29	12/14/16 07:39	1
Nitrobenzene-d5	91		33 - 124	12/10/16 09:29	12/14/16 07:39	1
2-Fluorobiphenyl	78		42 - 115	12/10/16 09:29	12/14/16 07:39	1
2,4,6-Tribromophenol	36		25 - 130	12/10/16 09:29	12/14/16 07:39	1
Terphenyl-d14	96		25 - 150	12/10/16 09:29	12/14/16 07:39	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	0.90	0.19	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Arsenic	4.2		0.45	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Barium	71		0.45	0.082	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Beryllium	0.47		0.18	0.039	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Boron	3.0		2.2	0.31	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Cadmium	0.35		0.090	0.026	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Calcium	22000		9.0	2.9	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Chromium	13	B	0.45	0.077	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Cobalt	5.5		0.22	0.051	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Copper	12		0.45	0.097	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Iron	13000		9.0	3.5	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Lead	22		0.22	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Magnesium	11000		4.5	1.8	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Manganese	410		0.45	0.089	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Nickel	13	B	0.45	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Potassium	1100		22	3.7	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Selenium	<0.45		0.45	0.22	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Silver	<0.22		0.22	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Sodium	170		45	5.9	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Thallium	0.93		0.45	0.22	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Vanadium	18		0.22	0.065	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Zinc	39		0.90	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:38	1
Boron	0.072	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:38	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Client Sample ID: 1314V3-01-B20 (0-6)

Lab Sample ID: 500-120882-16

Date Collected: 12/01/16 16:45

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:16	12/07/16 15:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 15:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 15:38	1
Manganese	0.17		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Selenium	0.021	J	0.050	0.020	mg/L		12/06/16 14:16	12/07/16 15:38	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 15:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.44		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 22:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:16	12/07/16 20:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 20:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.016	0.0086	mg/Kg	☼	12/05/16 14:30	12/06/16 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU			12/06/16 15:45	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

Qualifiers

GC/MS Semi VOA

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

Metals

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

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-6

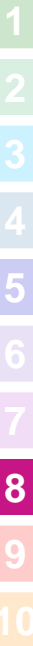
Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

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

Chain of Custody Record

Lab Job #: 500-120882
 Chain of Custody Number: EG4616
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter					Preservative Key	
Project Name		Lab Project #		Parameter								
Project Location/State		Lab Project #		Parameter							Comments	
Sampler		Lab PM		Parameter								
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	TOH TAC	TURBIDITY	PH/°C Sol.d	
14		1314V3-01-B30(0-0)	12-11-16	1610	2	S	X	X	X	X	X	
15		1314V3-01-B31(0-0)	12-11-16	1620	2	S	X	X	X	X	X	
16		1314V3-01-B20(0-0)	12-11-16	1645	2	S	X	X	X	X	X	
<p><i>EG 12-1-16</i></p>												

- Preservative Key**
- HCL, Cool to 4°
 - H2SO4, Cool to 4°
 - HNO3, Cool to 4°
 - NaOH, Cool to 4°
 - NaOH/Zn, Cool to 4°
 - NaHSO4
 - Cool to 4°
 - None
 - Other

Turnaround Time Required (Business Days)

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

Requested Due Date _____

Sample Disposal

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

Relinquished By _____	Company <u>FE</u>	Date <u>12-1-16</u>	Time <u>1730</u>	Received By <u>Shirley Scott</u>	Company <u>TH-CROT</u>	Date <u>12/2/16</u>	Time <u>1010</u>
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____

Lab Courier _____
 Shipped Red X
 Hand Delivered _____

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

Client Comments _____

Lab Comments _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120882-6

Login Number: 120882

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6.3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

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: 500-120935-1
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout



Authorized for release by:
12/16/2016 2:48:59 PM

Richard Wright, Senior Project Manager
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LINKS

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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

15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	12
Sample Summary	13
Client Sample Results	14
Definitions	46
QC Association	47
Surrogate Summary	53
QC Sample Results	54
Chronicle	65
Certification Summary	72
Chain of Custody	73
Receipt Checklists	74

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Job ID: 500-120935-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120935-1

Comments

No additional comments.

Receipt

The samples were received on 12/2/2016 4:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-364515 had 3 analytes outside control limits: 2,4-Dinitrophenol; 4-Nitroaniline; and Hexachlorocyclopentadiene. These results have been reported and qualified. (LCS 500-364515/2-A)

Method(s) 8270D: The following samples contained one base/neutral surrogate outside acceptance limits: 1314V3-01-B27 (0-8) (500-120935-2) and 1314V3-01-B27 (8-15) (500-120935-3). The laboratory's SOP allows one acid and one base/neutral surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The following sample required a dilution due to the nature of the sample matrix: 1314V3-01-B27 (8-15) (500-120935-3). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

Metals

Method(s) 6020A: The internal standard (Tb) was used to report the element Thallium in batch 500-364154. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

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 - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B28 (0-4.5)

Lab Sample ID: 500-120935-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	51	F1	0.50	0.091	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6	F1	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	F1	0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000	F2	10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.50	0.086	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.7		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	9.5		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000	F2	5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	180	F2	0.50	0.099	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	740	F1 F2	25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	F1	0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	500		50	6.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.25	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	40		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.057	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0028	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	5.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	9.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.036		0.018	0.0080	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.30		0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.15		0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.20		0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.14		0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.071	J	0.19	0.045	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.12		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.50		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.46		0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.17	J	0.19	0.095	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.9		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	2.0		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
3,3'-Dichlorobenzidine	0.15	J	0.19	0.053	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.69		0.19	0.070	mg/Kg	1	☼	8270D	Total/NA
Pyrene - DL	3.3		0.38	0.076	mg/Kg	10	☼	8270D	Total/NA
Chrysene - DL	4.1		0.38	0.10	mg/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	17		0.38	0.082	mg/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene - DL	5.2		0.38	0.11	mg/Kg	10	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (0-8) (Continued)

Lab Sample ID: 500-120935-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene - DL	11		0.38	0.074	mg/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene - DL	5.8		0.38	0.099	mg/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene - DL	2.1		0.38	0.074	mg/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene - DL	6.0		0.38	0.12	mg/Kg	10	☼	8270D	Total/NA
Arsenic	4.7		0.46	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	210		0.46	0.084	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.18	0.040	mg/Kg	1	☼	6010B	Total/NA
Boron	9.7		2.3	0.32	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.2		0.092	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	21000		9.2	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	26	B	0.46	0.079	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.23	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	51	B	0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	9.2	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	1600		0.23	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5700		4.6	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	200		0.46	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.46	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	600		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	480		46	6.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.23	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	680		0.92	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	0.89		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.079	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0086		0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.37		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	6.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.97	B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	1.4		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.74		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.19		0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B27 (8-15)

Lab Sample ID: 500-120935-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
Ethylbenzene	0.045		0.0016	0.00078	mg/Kg	1	☼	8260B	Total/NA
Tetrachloroethene	0.0025		0.0016	0.00055	mg/Kg	1	☼	8260B	Total/NA
Toluene	0.0078		0.0016	0.00041	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.27		0.0032	0.00052	mg/Kg	1	☼	8260B	Total/NA
Acenaphthylene	0.91		0.037	0.0048	mg/Kg	1	☼	8270D	Total/NA
Naphthalene - DL	15		0.73	0.11	mg/Kg	20	☼	8270D	Total/NA
2-Methylnaphthalene - DL	19		1.5	0.14	mg/Kg	20	☼	8270D	Total/NA
Acenaphthene - DL	33		0.73	0.13	mg/Kg	20	☼	8270D	Total/NA
Dibenzofuran - DL	24		3.7	0.86	mg/Kg	20	☼	8270D	Total/NA
Fluorene - DL	32		0.73	0.10	mg/Kg	20	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (8-15) (Continued)

Lab Sample ID: 500-120935-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene - DL	22		0.73	0.12	mg/Kg	20	☼	8270D	Total/NA
Carbazole - DL	4.8		3.7	1.8	mg/Kg	20	☼	8270D	Total/NA
Pyrene - DL	45		0.73	0.15	mg/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene - DL	18		0.73	0.099	mg/Kg	20	☼	8270D	Total/NA
Chrysene - DL	18		0.73	0.20	mg/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	16		0.73	0.16	mg/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene - DL	5.9		0.73	0.22	mg/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene - DL	10		0.73	0.14	mg/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene - DL	2.5		0.73	0.19	mg/Kg	20	☼	8270D	Total/NA
Dibenz(a,h)anthracene - DL	0.86		0.73	0.14	mg/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene - DL	1.9		0.73	0.24	mg/Kg	20	☼	8270D	Total/NA
Phenanthrene - DL2	98		3.7	0.51	mg/Kg	100	☼	8270D	Total/NA
Fluoranthene - DL2	74		3.7	0.68	mg/Kg	100	☼	8270D	Total/NA
Arsenic	5.1		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	4.0		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.37		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.4	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.9		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	17	B	0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	49		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	620		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	410		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	100		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.87		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	5.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.058	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B27 (15-22)

Lab Sample ID: 500-120935-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.017	J	0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.017	J	0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.045		0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.036		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.089		0.036	0.0051	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 - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (15-22) (Continued)

Lab Sample ID: 500-120935-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.021	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.11		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.088		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.061		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.063		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.091		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.034	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.058		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0093	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		0.51	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.51	0.093	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	2.5	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.51	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.1		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Copper	12	B	0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.25	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	630		25	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	84		51	6.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.82		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.93		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.0077		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.036	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.023		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.37		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B35 (0-7)

Lab Sample ID: 500-120935-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.023	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.037	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.038		0.038	0.0075	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 - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7) (Continued)

Lab Sample ID: 500-120935-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.019	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.020	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.037	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.014	J	0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.1		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	62		0.50	0.091	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.37		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000		10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.50	0.086	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.6		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	9.7		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.50	0.099	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	530		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		50	6.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.25	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	37		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	1.2		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.097	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.0093		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	5.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.031		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.047		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.0092	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.013	J	0.039	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.042		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0074	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.046		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.038	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.020	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.039	0.011	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 - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)D (Continued)

Lab Sample ID: 500-120935-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.035	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.014	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.021	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.013	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.3		0.46	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.46	0.084	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.18	0.040	mg/Kg	1	☼	6010B	Total/NA
Boron	3.2		2.3	0.32	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.092	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000		9.2	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.46	0.079	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.4		0.23	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	9.2	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.23	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8500		4.6	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	180		0.46	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.46	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	660		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.32	J	0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		46	6.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.23	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		0.92	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	0.92		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.085	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0029	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.24	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	5.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.11	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.035		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B35 (7-14)

Lab Sample ID: 500-120935-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.020		0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
Arsenic	1.1		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	57		0.47	0.086	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.33		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA
Boron	1.6	J	2.3	0.33	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16		0.094	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	2200		9.4	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.5	B	0.47	0.080	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.4		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Copper	7.6	B	0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	7600	B	9.4	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	7.0		0.23	0.12	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 - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (7-14) (Continued)

Lab Sample ID: 500-120935-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1400		4.7	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	88		0.47	0.093	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	440		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		47	6.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.23	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		0.94	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	4.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.031	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.31		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.010	J	0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B35 (14-20)

Lab Sample ID: 500-120935-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.0085	J	0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.1		0.48	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	20		0.48	0.088	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.19	0.042	mg/Kg	1	☼	6010B	Total/NA
Boron	2.2	J	2.4	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.081	J	0.096	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000		9.6	3.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.48	0.083	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.2		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	9.6	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	7.6		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		4.8	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.48	0.095	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	640		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.36	J	0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	75		48	6.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.24	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		0.96	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.93		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	3.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.054		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.028	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.42		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (14-20) (Continued)

Lab Sample ID: 500-120935-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.013	J	0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



Method Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	SPLP Metals	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	TCLP Mercury	SW846	TAL CHI
7471B	Mercury (CVAA)	SW846	TAL CHI
9045D	pH	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120935-1	1314V3-01-B28 (0-4.5)	Solid	12/02/16 08:30	12/02/16 16:15
500-120935-2	1314V3-01-B27 (0-8)	Solid	12/02/16 09:55	12/02/16 16:15
500-120935-3	1314V3-01-B27 (8-15)	Solid	12/02/16 10:00	12/02/16 16:15
500-120935-4	1314V3-01-B27 (15-22)	Solid	12/02/16 10:05	12/02/16 16:15
500-120935-5	1314V3-01-B35 (0-7)	Solid	12/02/16 10:45	12/02/16 16:15
500-120935-6	1314V3-01-B35 (0-7)D	Solid	12/02/16 10:45	12/02/16 16:15
500-120935-7	1314V3-01-B35 (7-14)	Solid	12/02/16 10:55	12/02/16 16:15
500-120935-8	1314V3-01-B35 (14-20)	Solid	12/02/16 11:00	12/02/16 16:15



Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B28 (0-4.5)

Lab Sample ID: 500-120935-1

Date Collected: 12/02/16 08:30

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Xylenes, Total	<0.0032		0.0032	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/02/16 14:50	12/07/16 05:19	1
Dibromofluoromethane	100		75 - 120	12/02/16 14:50	12/07/16 05:19	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/02/16 14:50	12/07/16 05:19	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 14:50	12/07/16 05:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B28 (0-4.5)

Lab Sample ID: 500-120935-1

Date Collected: 12/02/16 08:30

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dinitrophenol	<0.77 *		0.77	0.67	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Nitroaniline	<0.38 *		0.38	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B28 (0-4.5)

Lab Sample ID: 500-120935-1

Date Collected: 12/02/16 08:30

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/10/16 10:34	12/12/16 14:24	1
Phenol-d5	114		36 - 123	12/10/16 10:34	12/12/16 14:24	1
Nitrobenzene-d5	98		33 - 124	12/10/16 10:34	12/12/16 14:24	1
2-Fluorobiphenyl	85		42 - 115	12/10/16 10:34	12/12/16 14:24	1
2,4,6-Tribromophenol	78		25 - 130	12/10/16 10:34	12/12/16 14:24	1
Terphenyl-d14	104		25 - 150	12/10/16 10:34	12/12/16 14:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0	F1	1.0	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Arsenic	2.2		0.50	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Barium	51	F1	0.50	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Beryllium	0.44		0.20	0.043	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Boron	2.6	F1	2.5	0.35	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Cadmium	0.14	F1	0.10	0.029	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Calcium	19000	F2	10	3.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Chromium	12	B	0.50	0.086	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Cobalt	6.7		0.25	0.056	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Copper	11	B	0.50	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Iron	10000	B	10	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Lead	9.5		0.25	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Magnesium	11000	F2	5.0	2.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Manganese	180	F2	0.50	0.099	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Nickel	17		0.50	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Potassium	740	F1 F2	25	4.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Selenium	0.52	F1	0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Silver	<0.25	F1	0.25	0.058	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Sodium	500		50	6.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Vanadium	19		0.25	0.073	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Zinc	40		1.0	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 14:37	1
Boron	0.057	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:37	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B28 (0-4.5)

Lab Sample ID: 500-120935-1

Date Collected: 12/02/16 08:30

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0028	J	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Cobalt	0.020	J	0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Manganese	5.4		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Nickel	0.027		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 14:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.9		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 20:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 20:41	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 10:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.017	0.0090	mg/Kg	☼	12/05/16 16:00	12/06/16 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.4		0.2	0.2	SU	-		12/08/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.036		0.018	0.0080	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/02/16 14:50	12/07/16 05:44	1
Dibromofluoromethane	97		75 - 120	12/02/16 14:50	12/07/16 05:44	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/02/16 14:50	12/07/16 05:44	1
Toluene-d8 (Surr)	107		75 - 123	12/02/16 14:50	12/07/16 05:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Naphthalene	0.30		0.038	0.0059	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Methylnaphthalene	0.15		0.077	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dinitrophenol	<0.77 *		0.77	0.67	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Acenaphthylene	0.20		0.038	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Acenaphthene	0.14		0.038	0.0069	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Dibenzofuran	0.071 J		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Fluorene	0.12		0.038	0.0054	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Nitroaniline	<0.38 *		0.38	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Phenanthrene	0.50		0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Anthracene	0.46		0.038	0.0064	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Carbazole	0.17 J		0.19	0.095	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Fluoranthene	1.9		0.038	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Benzo[a]anthracene	2.0		0.038	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
3,3'-Dichlorobenzidine	0.15 J		0.19	0.053	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	0.69		0.19	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/10/16 10:34	12/12/16 17:49	1
Phenol-d5	106		36 - 123	12/10/16 10:34	12/12/16 17:49	1
Nitrobenzene-d5	87		33 - 124	12/10/16 10:34	12/12/16 17:49	1
2-Fluorobiphenyl	84		42 - 115	12/10/16 10:34	12/12/16 17:49	1
2,4,6-Tribromophenol	87		25 - 130	12/10/16 10:34	12/12/16 17:49	1
Terphenyl-d14	164	X	25 - 150	12/10/16 10:34	12/12/16 17:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	3.3		0.38	0.076	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
Chrysene	4.1		0.38	0.10	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
Benzo[b]fluoranthene	17		0.38	0.082	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
Benzo[k]fluoranthene	5.2		0.38	0.11	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
Benzo[a]pyrene	11		0.38	0.074	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
Indeno[1,2,3-cd]pyrene	5.8		0.38	0.099	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
Dibenz(a,h)anthracene	2.1		0.38	0.074	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
Benzo[g,h,i]perylene	6.0		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.92		0.92	0.19	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Arsenic	4.7		0.46	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Barium	210		0.46	0.084	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Beryllium	0.71		0.18	0.040	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Boron	9.7		2.3	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Cadmium	1.2		0.092	0.027	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Calcium	21000		9.2	3.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Chromium	26	B	0.46	0.079	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Cobalt	5.5		0.23	0.052	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Copper	51	B	0.46	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Iron	12000	B	9.2	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Lead	1600		0.23	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Magnesium	5700		4.6	1.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Manganese	200		0.46	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Nickel	19		0.46	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Potassium	600		23	3.8	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Selenium	0.83		0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Silver	<0.23		0.23	0.054	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Sodium	480		46	6.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Thallium	<0.46		0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Vanadium	15		0.23	0.067	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Zinc	680		0.92	0.29	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.7

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.89		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 14:42	1
Boron	0.079	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:42	1
Cadmium	0.0086		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 14:42	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
Cobalt	0.027		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 14:42	1
Lead	0.37		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 14:42	1
Manganese	6.2		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
Nickel	0.033		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 14:42	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
Zinc	0.97	B	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 14:42	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.4		0.0075	0.0075	mg/L		12/06/16 09:57	12/08/16 01:08	1
Manganese	0.74		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 01:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 09:57	12/08/16 01:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 20:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 20:44	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 11:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.019	0.0098	mg/Kg	☼	12/05/16 16:00	12/06/16 13:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.1		0.2	0.2	SU			12/08/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (8-15)

Lab Sample ID: 500-120935-3

Date Collected: 12/02/16 10:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.021		0.016	0.0071	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Ethylbenzene	0.045		0.0016	0.00078	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Tetrachloroethene	0.0025		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Toluene	0.0078		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Xylenes, Total	0.27		0.0032	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/02/16 14:50	12/07/16 06:09	1
Dibromofluoromethane	102		75 - 120	12/02/16 14:50	12/07/16 06:09	1
1,2-Dichloroethane-d4 (Surr)	114		69 - 134	12/02/16 14:50	12/07/16 06:09	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 14:50	12/07/16 06:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.082	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (8-15)

Lab Sample ID: 500-120935-3

Date Collected: 12/02/16 10:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachlorocyclopentadiene	<0.74 *		0.74	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dinitrophenol	<0.74 *		0.74	0.65	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Acenaphthylene	0.91		0.037	0.0048	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Nitroaniline	<0.37 *		0.37	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130				12/10/16 10:34	12/12/16 18:15	1
Phenol-d5	107		36 - 123				12/10/16 10:34	12/12/16 18:15	1
Nitrobenzene-d5	90		33 - 124				12/10/16 10:34	12/12/16 18:15	1
2-Fluorobiphenyl	83		42 - 115				12/10/16 10:34	12/12/16 18:15	1
2,4,6-Tribromophenol	92		25 - 130				12/10/16 10:34	12/12/16 18:15	1
Terphenyl-d14	163	X	25 - 150				12/10/16 10:34	12/12/16 18:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	15		0.73	0.11	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
2-Methylnaphthalene	19		1.5	0.14	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Acenaphthene	33		0.73	0.13	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Dibenzofuran	24		3.7	0.86	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Fluorene	32		0.73	0.10	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Anthracene	22		0.73	0.12	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Carbazole	4.8		3.7	1.8	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Pyrene	45		0.73	0.15	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[a]anthracene	18		0.73	0.099	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Chrysene	18		0.73	0.20	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[b]fluoranthene	16		0.73	0.16	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[k]fluoranthene	5.9		0.73	0.22	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[a]pyrene	10		0.73	0.14	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Indeno[1,2,3-cd]pyrene	2.5		0.73	0.19	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Dibenz(a,h)anthracene	0.86		0.73	0.14	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[g,h,i]perylene	1.9		0.73	0.24	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	98		3.7	0.51	mg/Kg	☼	12/10/16 10:34	12/13/16 10:36	100
Fluoranthene	74		3.7	0.68	mg/Kg	☼	12/10/16 10:34	12/13/16 10:36	100

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Arsenic	5.1		0.56	0.26	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Barium	56		0.56	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Beryllium	0.43		0.22	0.048	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Boron	4.0		2.8	0.39	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Cadmium	0.37		0.11	0.032	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Calcium	30000		11	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Chromium	8.4	B	0.56	0.096	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Cobalt	6.9		0.28	0.063	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Copper	17	B	0.56	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Iron	12000	B	11	4.3	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Lead	49		0.28	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Magnesium	12000		5.6	2.3	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Manganese	350		0.56	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Nickel	14		0.56	0.15	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Potassium	620		28	4.5	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Selenium	0.68		0.56	0.28	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Sodium	410		56	7.4	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Vanadium	14		0.28	0.081	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Zinc	100		1.1	0.35	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.87		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 14:47	1
Boron	0.064	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:47	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 14:47	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (8-15)

Lab Sample ID: 500-120935-3

Date Collected: 12/02/16 10:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.028		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 14:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 14:47	1
Manganese	5.3		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
Nickel	0.040		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 14:47	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
Zinc	0.058	J B	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 14:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.74		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 01:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 20:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 20:47	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 11:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.018	0.0095	mg/Kg	☼	12/05/16 16:00	12/06/16 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			12/08/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (15-22)

Lab Sample ID: 500-120935-4

Date Collected: 12/02/16 10:05

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Bromodichloromethane	<0.0016		0.0016	0.00034	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1-Dichloroethane	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,2-Dichloropropane	<0.0016		0.0016	0.00043	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Toluene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00071	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/02/16 14:50	12/07/16 06:34	1
Dibromofluoromethane	103		75 - 120	12/02/16 14:50	12/07/16 06:34	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/02/16 14:50	12/07/16 06:34	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 14:50	12/07/16 06:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (15-22)

Lab Sample ID: 500-120935-4

Date Collected: 12/02/16 10:05

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Naphthalene	0.017	J	0.036	0.0056	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachlorocyclopentadiene	<0.74	*	0.74	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Methylnaphthalene	0.017	J	0.074	0.0067	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dinitrophenol	<0.74	*	0.74	0.64	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Acenaphthene	0.045		0.036	0.0066	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Fluorene	0.036		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Nitroaniline	<0.36	*	0.36	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Phenanthrene	0.089		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Anthracene	0.021	J	0.036	0.0061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Fluoranthene	0.11		0.036	0.0068	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Pyrene	0.088		0.036	0.0073	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Benzo[a]anthracene	0.061		0.036	0.0049	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (15-22)

Lab Sample ID: 500-120935-4

Date Collected: 12/02/16 10:05

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.063		0.036	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Benzo[b]fluoranthene	0.091		0.036	0.0079	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Benzo[k]fluoranthene	0.034	J	0.036	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Benzo[a]pyrene	0.058		0.036	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Indeno[1,2,3-cd]pyrene	0.021	J	0.036	0.0095	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Dibenz(a,h)anthracene	0.0093	J	0.036	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Benzo[g,h,i]perylene	0.015	J	0.036	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		40 - 130	12/10/16 10:34	12/12/16 14:50	1
Phenol-d5	107		36 - 123	12/10/16 10:34	12/12/16 14:50	1
Nitrobenzene-d5	92		33 - 124	12/10/16 10:34	12/12/16 14:50	1
2-Fluorobiphenyl	82		42 - 115	12/10/16 10:34	12/12/16 14:50	1
2,4,6-Tribromophenol	78		25 - 130	12/10/16 10:34	12/12/16 14:50	1
Terphenyl-d14	96		25 - 150	12/10/16 10:34	12/12/16 14:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Arsenic	3.6		0.51	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Barium	46		0.51	0.093	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Beryllium	0.42		0.20	0.044	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Boron	2.0	J	2.5	0.36	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Cadmium	0.13		0.10	0.029	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Calcium	26000		10	3.3	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Chromium	13	B	0.51	0.087	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Cobalt	8.1		0.25	0.057	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Copper	12	B	0.51	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Iron	12000	B	10	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Lead	13		0.25	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Magnesium	11000		5.1	2.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Manganese	280		0.51	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Nickel	20		0.51	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Potassium	630		25	4.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Selenium	0.31	J	0.51	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Silver	<0.25		0.25	0.060	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Sodium	84		51	6.7	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Vanadium	15		0.25	0.074	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Zinc	39		1.0	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.82		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:15	1
Boron	0.059	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (15-22)

Lab Sample ID: 500-120935-4

Date Collected: 12/02/16 10:05

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0021	J	0.0050	0.0020	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Chromium	<0.025		0.025	0.010	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Cobalt	0.020	J	0.025	0.010	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Iron	0.93		0.40	0.20	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Lead	0.0077		0.0075	0.0075	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Manganese	3.1		0.025	0.010	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Nickel	0.038		0.025	0.010	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Selenium	<0.050		0.050	0.020	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Silver	<0.025		0.025	0.010	mg/L	—	12/06/16 14:18	12/07/16 15:15	1
Zinc	0.036	J B	0.50	0.020	mg/L	—	12/06/16 14:18	12/07/16 15:15	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.023		0.0075	0.0075	mg/L	—	12/06/16 09:57	12/08/16 01:22	1
Manganese	0.37		0.025	0.010	mg/L	—	12/06/16 09:57	12/08/16 01:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	—	12/06/16 14:18	12/07/16 20:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L	—	12/06/16 14:18	12/07/16 20:51	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	—	12/06/16 13:45	12/07/16 11:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.017	0.0091	mg/Kg	☼	12/05/16 16:00	12/06/16 13:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU	—		12/08/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)

Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 120	12/02/16 14:50	12/07/16 06:59	1
Dibromofluoromethane	99		75 - 120	12/02/16 14:50	12/07/16 06:59	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/02/16 14:50	12/07/16 06:59	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 14:50	12/07/16 06:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)

Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dinitrophenol	<0.77 *		0.77	0.67	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Nitroaniline	<0.38 *		0.38	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Phenanthrene	0.023	J	0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Fluoranthene	0.037	J	0.038	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Pyrene	0.038		0.038	0.0075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Benzo[a]anthracene	0.019	J	0.038	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)

Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.020	J	0.038	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Benzo[b]fluoranthene	0.037	J	0.038	0.0082	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Benzo[k]fluoranthene	0.018	J	0.038	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Benzo[a]pyrene	0.024	J	0.038	0.0074	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Indeno[1,2,3-cd]pyrene	0.014	J	0.038	0.0098	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/10/16 10:34	12/12/16 15:15	1
Phenol-d5	108		36 - 123	12/10/16 10:34	12/12/16 15:15	1
Nitrobenzene-d5	91		33 - 124	12/10/16 10:34	12/12/16 15:15	1
2-Fluorobiphenyl	83		42 - 115	12/10/16 10:34	12/12/16 15:15	1
2,4,6-Tribromophenol	89		25 - 130	12/10/16 10:34	12/12/16 15:15	1
Terphenyl-d14	109		25 - 150	12/10/16 10:34	12/12/16 15:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Arsenic	4.1		0.50	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Barium	62		0.50	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Beryllium	0.37		0.20	0.043	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Boron	2.3	J	2.5	0.35	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Cadmium	0.12		0.10	0.029	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Calcium	19000		10	3.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Chromium	12	B	0.50	0.086	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Cobalt	7.6		0.25	0.056	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Copper	11	B	0.50	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Iron	11000	B	10	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Lead	9.7		0.25	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Magnesium	11000		5.0	2.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Manganese	300		0.50	0.099	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Nickel	16		0.50	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Potassium	530		25	4.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Selenium	0.30	J	0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Silver	<0.25		0.25	0.058	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Sodium	190		50	6.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Vanadium	21		0.25	0.073	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Zinc	37		1.0	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.2		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:20	1
Boron	0.097	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:20	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)

Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0027	J	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Cobalt	0.048		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Lead	0.0093		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Manganese	5.9		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Nickel	0.046		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Zinc	0.15	J B	0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:20	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.031		0.0075	0.0075	mg/L	-	12/06/16 09:57	12/08/16 01:29	1
Manganese	0.21		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 20:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 20:54	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 11:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.020	0.010	mg/Kg	☼	12/05/16 16:00	12/06/16 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/08/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/02/16 14:50	12/07/16 07:24	1
Dibromofluoromethane	98		75 - 120	12/02/16 14:50	12/07/16 07:24	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/02/16 14:50	12/07/16 07:24	1
Toluene-d8 (Surr)	104		75 - 123	12/02/16 14:50	12/07/16 07:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachlorocyclopentadiene	<0.79	*	0.79	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Methylnaphthalene	0.0092	J	0.079	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Acenaphthene	0.013	J	0.039	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Fluorene	0.013	J	0.039	0.0055	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Nitroaniline	<0.39	*	0.39	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Phenanthrene	0.042		0.039	0.0054	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Anthracene	0.0074	J	0.039	0.0065	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Fluoranthene	0.046		0.039	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Pyrene	0.038	J	0.039	0.0077	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Benzo[a]anthracene	0.020	J	0.039	0.0052	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.039	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Benzo[b]fluoranthene	0.035	J	0.039	0.0084	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Benzo[k]fluoranthene	0.014	J	0.039	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Benzo[a]pyrene	0.021	J	0.039	0.0075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Indeno[1,2,3-cd]pyrene	0.013	J	0.039	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/10/16 10:34	12/12/16 15:41	1
Phenol-d5	106		36 - 123	12/10/16 10:34	12/12/16 15:41	1
Nitrobenzene-d5	93		33 - 124	12/10/16 10:34	12/12/16 15:41	1
2-Fluorobiphenyl	80		42 - 115	12/10/16 10:34	12/12/16 15:41	1
2,4,6-Tribromophenol	85		25 - 130	12/10/16 10:34	12/12/16 15:41	1
Terphenyl-d14	102		25 - 150	12/10/16 10:34	12/12/16 15:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.92		0.92	0.19	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Arsenic	4.3		0.46	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Barium	61		0.46	0.084	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Beryllium	0.45		0.18	0.040	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Boron	3.2		2.3	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Cadmium	0.17		0.092	0.027	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Calcium	15000		9.2	3.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Chromium	12	B	0.46	0.079	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Cobalt	8.4		0.23	0.052	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Copper	11	B	0.46	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Iron	10000	B	9.2	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Lead	17		0.23	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Magnesium	8500		4.6	1.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Manganese	180		0.46	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Nickel	17		0.46	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Potassium	660		23	3.8	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Selenium	0.32	J	0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Silver	<0.23		0.23	0.054	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Sodium	160		46	6.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Thallium	<0.46		0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Vanadium	19		0.23	0.067	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Zinc	64		0.92	0.29	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.92		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:25	1
Boron	0.085	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0029	J	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Cobalt	0.035		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Iron	0.24	J	0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Manganese	5.5		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Nickel	0.040		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Zinc	0.11	J B	0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.36		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 20:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 20:58	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 11:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.018	0.0096	mg/Kg	☼	12/05/16 16:00	12/06/16 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU	-		12/08/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (7-14)

Lab Sample ID: 500-120935-7

Date Collected: 12/02/16 10:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.020		0.017	0.0075	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/02/16 14:50	12/07/16 07:48	1
Dibromofluoromethane	100		75 - 120	12/02/16 14:50	12/07/16 07:48	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/02/16 14:50	12/07/16 07:48	1
Toluene-d8 (Surr)	101		75 - 123	12/02/16 14:50	12/07/16 07:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (7-14)

Lab Sample ID: 500-120935-7

Date Collected: 12/02/16 10:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachlorocyclopentadiene	<0.75 *		0.75	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dinitrophenol	<0.75 *		0.75	0.65	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Nitroaniline	<0.37 *		0.37	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (7-14)

Lab Sample ID: 500-120935-7

Date Collected: 12/02/16 10:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/10/16 10:34	12/12/16 16:07	1
Phenol-d5	114		36 - 123	12/10/16 10:34	12/12/16 16:07	1
Nitrobenzene-d5	100		33 - 124	12/10/16 10:34	12/12/16 16:07	1
2-Fluorobiphenyl	86		42 - 115	12/10/16 10:34	12/12/16 16:07	1
2,4,6-Tribromophenol	86		25 - 130	12/10/16 10:34	12/12/16 16:07	1
Terphenyl-d14	102		25 - 150	12/10/16 10:34	12/12/16 16:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.94		0.94	0.19	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Arsenic	1.1		0.47	0.22	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Barium	57		0.47	0.086	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Beryllium	0.33		0.19	0.041	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Boron	1.6 J		2.3	0.33	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Cadmium	0.16		0.094	0.027	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Calcium	2200		9.4	3.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Chromium	8.5 B		0.47	0.080	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Cobalt	4.4		0.23	0.053	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Copper	7.6 B		0.47	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Iron	7600 B		9.4	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Lead	7.0		0.23	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Magnesium	1400		4.7	1.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Manganese	88		0.47	0.093	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Nickel	11		0.47	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Potassium	440		23	3.8	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Selenium	0.38 J		0.47	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Silver	<0.23		0.23	0.055	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Sodium	120		47	6.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Thallium	<0.47		0.47	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Vanadium	13		0.23	0.068	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Zinc	34		0.94	0.30	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.77		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:29	1
Boron	0.055 J		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:29	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (7-14)

Lab Sample ID: 500-120935-7

Date Collected: 12/02/16 10:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0026	J	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Cobalt	0.020	J	0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Manganese	4.7		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Nickel	0.021	J	0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Zinc	0.031	J B	0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.31		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 21:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 21:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 11:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.017	0.0091	mg/Kg	☼	12/05/16 16:00	12/06/16 13:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU	-		12/08/16 15:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (14-20)

Lab Sample ID: 500-120935-8

Date Collected: 12/02/16 11:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/02/16 14:50	12/07/16 08:13	1
Dibromofluoromethane	101		75 - 120	12/02/16 14:50	12/07/16 08:13	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/02/16 14:50	12/07/16 08:13	1
Toluene-d8 (Surr)	104		75 - 123	12/02/16 14:50	12/07/16 08:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (14-20)

Lab Sample ID: 500-120935-8

Date Collected: 12/02/16 11:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachlorocyclopentadiene	<0.73	*	0.73	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Nitroaniline	<0.36	*	0.36	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Pyrene	0.0085	J	0.036	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (14-20)

Lab Sample ID: 500-120935-8

Date Collected: 12/02/16 11:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/10/16 10:34	12/12/16 16:32	1
Phenol-d5	111		36 - 123	12/10/16 10:34	12/12/16 16:32	1
Nitrobenzene-d5	97		33 - 124	12/10/16 10:34	12/12/16 16:32	1
2-Fluorobiphenyl	83		42 - 115	12/10/16 10:34	12/12/16 16:32	1
2,4,6-Tribromophenol	84		25 - 130	12/10/16 10:34	12/12/16 16:32	1
Terphenyl-d14	101		25 - 150	12/10/16 10:34	12/12/16 16:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.96		0.96	0.20	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Arsenic	3.1		0.48	0.22	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Barium	20		0.48	0.088	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Beryllium	0.42		0.19	0.042	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Boron	2.2 J		2.4	0.34	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Cadmium	0.081 J		0.096	0.028	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Calcium	23000		9.6	3.1	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Chromium	10 B		0.48	0.083	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Cobalt	6.2		0.24	0.054	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Copper	11 B		0.48	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Iron	11000 B		9.6	3.7	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Lead	7.6		0.24	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Magnesium	11000		4.8	2.0	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Manganese	230		0.48	0.095	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Nickel	13		0.48	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Potassium	640		24	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Selenium	0.36 J		0.48	0.24	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Silver	<0.24		0.24	0.056	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Sodium	75		48	6.4	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Thallium	<0.48		0.48	0.24	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Vanadium	15		0.24	0.070	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Zinc	31		0.96	0.31	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.51		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:34	1
Boron	0.059 J		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:34	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (14-20)

Lab Sample ID: 500-120935-8

Date Collected: 12/02/16 11:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 15:34	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
Cobalt	0.023	J	0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
Iron	0.93		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 15:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 15:34	1
Manganese	3.6		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
Nickel	0.054		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 15:34	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
Zinc	0.028	J B	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 15:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.42		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 02:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 21:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 21:04	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 11:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.018	0.0093	mg/Kg	☼	12/05/16 16:00	12/06/16 13:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			12/08/16 15:49	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Qualifiers

GC/MS Semi VOA

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

Metals

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

Glossary

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

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

GC/MS VOA

Prep Batch: 363519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	5035	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	5035	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	5035	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	5035	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	5035	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	5035	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	5035	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	5035	

Analysis Batch: 363772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	8260B	363519
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	8260B	363519
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	8260B	363519
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	8260B	363519
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	8260B	363519
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	8260B	363519
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	8260B	363519
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	8260B	363519
MB 500-363772/4	Method Blank	Total/NA	Solid	8260B	
LCS 500-363772/3	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 364515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3541	
500-120935-2 - DL	1314V3-01-B27 (0-8)	Total/NA	Solid	3541	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	3541	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	3541	
500-120935-3 - DL	1314V3-01-B27 (8-15)	Total/NA	Solid	3541	
500-120935-3 - DL2	1314V3-01-B27 (8-15)	Total/NA	Solid	3541	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	3541	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	3541	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	3541	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	3541	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	3541	
MB 500-364515/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-364515/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 364605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	8270D	364515
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	8270D	364515
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	8270D	364515
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	8270D	364515
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	8270D	364515
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	8270D	364515
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	8270D	364515
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	8270D	364515

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

GC/MS Semi VOA (Continued)

Analysis Batch: 364605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-364515/1-A	Method Blank	Total/NA	Solid	8270D	364515
LCS 500-364515/2-A	Lab Control Sample	Total/NA	Solid	8270D	364515

Analysis Batch: 364791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-2 - DL	1314V3-01-B27 (0-8)	Total/NA	Solid	8270D	364515
500-120935-3 - DL2	1314V3-01-B27 (8-15)	Total/NA	Solid	8270D	364515
500-120935-3 - DL	1314V3-01-B27 (8-15)	Total/NA	Solid	8270D	364515

Metals

Prep Batch: 363688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	7471B	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	7471B	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	7471B	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	7471B	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	7471B	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	7471B	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	7471B	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	7471B	
MB 500-363688/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-363688/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Leach Batch: 363725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	SPLP East	Solid	1312	
500-120935-2	1314V3-01-B27 (0-8)	SPLP East	Solid	1312	
500-120935-3	1314V3-01-B27 (8-15)	SPLP East	Solid	1312	
500-120935-4	1314V3-01-B27 (15-22)	SPLP East	Solid	1312	
500-120935-5	1314V3-01-B35 (0-7)	SPLP East	Solid	1312	
500-120935-6	1314V3-01-B35 (0-7)D	SPLP East	Solid	1312	
500-120935-7	1314V3-01-B35 (7-14)	SPLP East	Solid	1312	
500-120935-8	1314V3-01-B35 (14-20)	SPLP East	Solid	1312	
LB 500-363725/1-B	Method Blank	SPLP East	Solid	1312	
500-120935-8 MS	1314V3-01-B35 (14-20)	SPLP East	Solid	1312	
500-120935-8 DU	1314V3-01-B35 (14-20)	SPLP East	Solid	1312	

Leach Batch: 363730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	1311	
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	1311	
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	1311	
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	1311	
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	1311	
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	1311	
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	1311	
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	1311	
LB 500-363730/1-B	Method Blank	TCLP	Solid	1311	
LB 500-363730/1-C	Method Blank	TCLP	Solid	1311	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Metals (Continued)

Leach Batch: 363730 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1 MS	1314V3-01-B28 (0-4.5)	TCLP	Solid	1311	
500-120935-1 DU	1314V3-01-B28 (0-4.5)	TCLP	Solid	1311	

Prep Batch: 363771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	SPLP East	Solid	3010A	363725
500-120935-2	1314V3-01-B27 (0-8)	SPLP East	Solid	3010A	363725
500-120935-3	1314V3-01-B27 (8-15)	SPLP East	Solid	3010A	363725
500-120935-4	1314V3-01-B27 (15-22)	SPLP East	Solid	3010A	363725
500-120935-5	1314V3-01-B35 (0-7)	SPLP East	Solid	3010A	363725
500-120935-6	1314V3-01-B35 (0-7)D	SPLP East	Solid	3010A	363725
500-120935-7	1314V3-01-B35 (7-14)	SPLP East	Solid	3010A	363725
500-120935-8	1314V3-01-B35 (14-20)	SPLP East	Solid	3010A	363725
LB 500-363725/1-B	Method Blank	SPLP East	Solid	3010A	363725
LCS 500-363771/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-120935-8 MS	1314V3-01-B35 (14-20)	SPLP East	Solid	3010A	363725
500-120935-8 DU	1314V3-01-B35 (14-20)	SPLP East	Solid	3010A	363725

Prep Batch: 363808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363730
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	7470A	363730
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	7470A	363730
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	7470A	363730
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	7470A	363730
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	7470A	363730
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	7470A	363730
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	7470A	363730
LB 500-363730/1-B	Method Blank	TCLP	Solid	7470A	363730
MB 500-363808/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-363808/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-120935-1 MS	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363730
500-120935-1 DU	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363730

Prep Batch: 363823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	3010A	363730
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	3010A	363730
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	3010A	363730
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	3010A	363730
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	3010A	363730
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	3010A	363730
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	3010A	363730
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	3010A	363730
LB 500-363730/1-C	Method Blank	TCLP	Solid	3010A	363730
LCS 500-363823/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 363848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	7471B	363688
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	7471B	363688

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Metals (Continued)

Analysis Batch: 363848 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	7471B	363688
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	7471B	363688
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	7471B	363688
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	7471B	363688
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	7471B	363688
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	7471B	363688
MB 500-363688/12-A	Method Blank	Total/NA	Solid	7471B	363688
LCS 500-363688/13-A	Lab Control Sample	Total/NA	Solid	7471B	363688

Prep Batch: 363943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	3050B	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	3050B	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	3050B	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	3050B	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	3050B	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	3050B	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	3050B	
MB 500-363943/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-363943/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-120935-1 MS	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	
500-120935-1 MSD	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	
500-120935-1 DU	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	

Analysis Batch: 363991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363808
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	7470A	363808
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	7470A	363808
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	7470A	363808
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	7470A	363808
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	7470A	363808
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	7470A	363808
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	7470A	363808
LB 500-363730/1-B	Method Blank	TCLP	Solid	7470A	363808
MB 500-363808/12-A	Method Blank	Total/NA	Solid	7470A	363808
LCS 500-363808/13-A	Lab Control Sample	Total/NA	Solid	7470A	363808
500-120935-1 MS	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363808
500-120935-1 DU	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363808

Analysis Batch: 364125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	6010B	363823
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	6010B	363823
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	6010B	363823
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	6010B	363823
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	6010B	363823
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	6010B	363823
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	6010B	363823
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	6010B	363823

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Metals (Continued)

Analysis Batch: 364125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-363730/1-C	Method Blank	TCLP	Solid	6010B	363823
LCS 500-363823/2-A	Lab Control Sample	Total/NA	Solid	6010B	363823

Analysis Batch: 364126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	6010B	363943
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	6010B	363943
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	6010B	363943
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	6010B	363943
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	6010B	363943
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	6010B	363943
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	6010B	363943
MB 500-363943/1-A	Method Blank	Total/NA	Solid	6010B	363943
LCS 500-363943/2-A	Lab Control Sample	Total/NA	Solid	6010B	363943
500-120935-1 MS	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943
500-120935-1 MSD	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943
500-120935-1 DU	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943

Analysis Batch: 364150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	SPLP East	Solid	6010B	363771
500-120935-2	1314V3-01-B27 (0-8)	SPLP East	Solid	6010B	363771
500-120935-3	1314V3-01-B27 (8-15)	SPLP East	Solid	6010B	363771
500-120935-4	1314V3-01-B27 (15-22)	SPLP East	Solid	6010B	363771
500-120935-5	1314V3-01-B35 (0-7)	SPLP East	Solid	6010B	363771
500-120935-6	1314V3-01-B35 (0-7)D	SPLP East	Solid	6010B	363771
500-120935-7	1314V3-01-B35 (7-14)	SPLP East	Solid	6010B	363771
500-120935-8	1314V3-01-B35 (14-20)	SPLP East	Solid	6010B	363771
LB 500-363725/1-B	Method Blank	SPLP East	Solid	6010B	363771
LCS 500-363771/2-A	Lab Control Sample	Total/NA	Solid	6010B	363771
500-120935-8 MS	1314V3-01-B35 (14-20)	SPLP East	Solid	6010B	363771
500-120935-8 DU	1314V3-01-B35 (14-20)	SPLP East	Solid	6010B	363771

Analysis Batch: 364154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	6020A	363823
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	6020A	363823
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	6020A	363823
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	6020A	363823
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	6020A	363823
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	6020A	363823
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	6020A	363823
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	6020A	363823
LB 500-363730/1-C	Method Blank	TCLP	Solid	6020A	363823
LCS 500-363823/2-A	Lab Control Sample	Total/NA	Solid	6020A	363823

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

General Chemistry

Analysis Batch: 363604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	Moisture	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	Moisture	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	Moisture	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	Moisture	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	Moisture	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	Moisture	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	Moisture	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	Moisture	
500-120935-1 DU	1314V3-01-B28 (0-4.5)	Total/NA	Solid	Moisture	

Analysis Batch: 364231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	9045D	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	9045D	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	9045D	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	9045D	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	9045D	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	9045D	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	9045D	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	12DCE	TOL
		(70-120)	(75-120)	(69-134)	(75-123)
500-120935-1	1314V3-01-B28 (0-4.5)	109	100	106	103
500-120935-2	1314V3-01-B27 (0-8)	109	97	103	107
500-120935-3	1314V3-01-B27 (8-15)	107	102	114	103
500-120935-4	1314V3-01-B27 (15-22)	104	103	104	102
500-120935-5	1314V3-01-B35 (0-7)	103	99	102	103
500-120935-6	1314V3-01-B35 (0-7)D	104	98	103	104
500-120935-7	1314V3-01-B35 (7-14)	105	100	107	101
500-120935-8	1314V3-01-B35 (14-20)	107	101	107	104
LCS 500-363772/3	Lab Control Sample	102	96	98	104
MB 500-363772/4	Method Blank	104	96	95	104

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPH
		(40-130)	(36-123)	(33-124)	(42-115)	(25-130)	(25-150)
500-120935-1	1314V3-01-B28 (0-4.5)	106	114	98	85	78	104
500-120935-2	1314V3-01-B27 (0-8)	97	106	87	84	87	164 X
500-120935-2 - DL	1314V3-01-B27 (0-8)	116	123	119	108	82	128
500-120935-3	1314V3-01-B27 (8-15)	99	107	90	83	92	163 X
500-120935-3 - DL	1314V3-01-B27 (8-15)	117	117	122	114	84	132
500-120935-3 - DL2	1314V3-01-B27 (8-15)	0 D	0 D	0 D	0 D	0 D	0 D
500-120935-4	1314V3-01-B27 (15-22)	100	107	92	82	78	96
500-120935-5	1314V3-01-B35 (0-7)	99	108	91	83	89	109
500-120935-6	1314V3-01-B35 (0-7)D	98	106	93	80	85	102
500-120935-7	1314V3-01-B35 (7-14)	106	114	100	86	86	102
500-120935-8	1314V3-01-B35 (14-20)	103	111	97	83	84	101
LCS 500-364515/2-A	Lab Control Sample	104	108	100	84	85	98
MB 500-364515/1-A	Method Blank	110	119	104	91	69	106

Surrogate Legend

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

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: MB 500-363772/4
Matrix: Solid
Analysis Batch: 363772

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/16 22:39	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 22:39	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/16 22:39	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 22:39	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/16 22:39	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/16 22:39	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/16 22:39	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 22:39	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/16 22:39	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 22:39	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 22:39	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 22:39	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/16 22:39	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 22:39	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/16 22:39	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 22:39	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 22:39	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 22:39	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/16 22:39	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 22:39	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/16 22:39	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 22:39	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 22:39	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 22:39	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/16 22:39	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 22:39	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/16 22:39	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 22:39	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 22:39	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 22:39	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 22:39	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/16 22:39	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/16 22:39	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 22:39	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/16 22:39	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 22:39	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/16 22:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120		12/06/16 22:39	1
Dibromofluoromethane	96		75 - 120		12/06/16 22:39	1
1,2-Dichloroethane-d4 (Surr)	95		69 - 134		12/06/16 22:39	1
Toluene-d8 (Surr)	104		75 - 123		12/06/16 22:39	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: LCS 500-363772/3

Matrix: Solid

Analysis Batch: 363772

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0468		mg/Kg		94	40 - 148
Benzene	0.0500	0.0454		mg/Kg		91	70 - 120
Bromodichloromethane	0.0500	0.0462		mg/Kg		92	67 - 120
Bromoform	0.0500	0.0472		mg/Kg		94	50 - 129
Bromomethane	0.0500	0.0457		mg/Kg		91	50 - 134
2-Butanone (MEK)	0.0500	0.0480		mg/Kg		96	47 - 138
Carbon disulfide	0.0500	0.0440		mg/Kg		88	67 - 133
Carbon tetrachloride	0.0500	0.0440		mg/Kg		88	65 - 123
Chlorobenzene	0.0500	0.0456		mg/Kg		91	70 - 120
Chloroethane	0.0500	0.0438		mg/Kg		88	40 - 150
Chloroform	0.0500	0.0466		mg/Kg		93	70 - 120
Chloromethane	0.0500	0.0441		mg/Kg		88	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0458		mg/Kg		92	70 - 120
Dibromochloromethane	0.0500	0.0492		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0448		mg/Kg		90	70 - 125
1,2-Dichloroethane	0.0500	0.0475		mg/Kg		95	65 - 126
1,1-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 122
1,2-Dichloropropane	0.0500	0.0442		mg/Kg		88	70 - 126
Ethylbenzene	0.0500	0.0454		mg/Kg		91	70 - 120
2-Hexanone	0.0500	0.0517		mg/Kg		103	51 - 139
Methylene Chloride	0.0500	0.0474		mg/Kg		95	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0505		mg/Kg		101	51 - 141
Methyl tert-butyl ether	0.0500	0.0448		mg/Kg		90	70 - 121
Styrene	0.0500	0.0462		mg/Kg		92	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0501		mg/Kg		100	70 - 125
Tetrachloroethene	0.0500	0.0465		mg/Kg		93	70 - 122
Toluene	0.0500	0.0464		mg/Kg		93	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0456		mg/Kg		91	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0464		mg/Kg		93	70 - 121
1,1,1-Trichloroethane	0.0500	0.0446		mg/Kg		89	70 - 120
1,1,2-Trichloroethane	0.0500	0.0481		mg/Kg		96	70 - 120
Trichloroethene	0.0500	0.0453		mg/Kg		91	70 - 124
Vinyl acetate	0.0500	0.0316		mg/Kg		63	40 - 150
Vinyl chloride	0.0500	0.0462		mg/Kg		92	64 - 125
Xylenes, Total	0.100	0.0931		mg/Kg		93	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 120
Dibromofluoromethane	96		75 - 120
1,2-Dichloroethane-d4 (Surr)	98		69 - 134
Toluene-d8 (Surr)	104		75 - 123

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: MB 500-364515/1-A

Matrix: Solid

Analysis Batch: 364605

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 364515

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/10/16 10:34	12/12/16 12:41	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: MB 500-364515/1-A
Matrix: Solid
Analysis Batch: 364605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 364515

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/10/16 10:34	12/12/16 12:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	110		40 - 130	12/10/16 10:34	12/12/16 12:41	1
Phenol-d5	119		36 - 123	12/10/16 10:34	12/12/16 12:41	1
Nitrobenzene-d5	104		33 - 124	12/10/16 10:34	12/12/16 12:41	1
2-Fluorobiphenyl	91		42 - 115	12/10/16 10:34	12/12/16 12:41	1
2,4,6-Tribromophenol	69		25 - 130	12/10/16 10:34	12/12/16 12:41	1
Terphenyl-d14	106		25 - 150	12/10/16 10:34	12/12/16 12:41	1

Lab Sample ID: LCS 500-364515/2-A
Matrix: Solid
Analysis Batch: 364605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 364515

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.51		mg/Kg		113	55 - 118
Bis(2-chloroethyl)ether	1.33	1.32		mg/Kg		99	53 - 116
1,3-Dichlorobenzene	1.33	1.13		mg/Kg		85	56 - 110
1,4-Dichlorobenzene	1.33	1.16		mg/Kg		87	57 - 110
1,2-Dichlorobenzene	1.33	1.14		mg/Kg		85	56 - 110
2-Methylphenol	1.33	1.28		mg/Kg		96	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.24		mg/Kg		93	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.45		mg/Kg		109	56 - 119
Hexachloroethane	1.33	1.17		mg/Kg		88	54 - 111
2-Chlorophenol	1.33	1.15		mg/Kg		86	57 - 117
Nitrobenzene	1.33	1.42		mg/Kg		106	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.37		mg/Kg		102	59 - 116
1,2,4-Trichlorobenzene	1.33	1.13		mg/Kg		85	60 - 116
Isophorone	1.33	1.24		mg/Kg		93	54 - 120
2,4-Dimethylphenol	1.33	1.18		mg/Kg		88	50 - 120
Hexachlorobutadiene	1.33	1.07		mg/Kg		80	56 - 120
Naphthalene	1.33	1.15		mg/Kg		86	58 - 116
2,4-Dichlorophenol	1.33	1.20		mg/Kg		90	61 - 116

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: LCS 500-364515/2-A
Matrix: Solid
Analysis Batch: 364605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 364515

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.72		mg/Kg		129	10 - 150
2,4,6-Trichlorophenol	1.33	1.10		mg/Kg		82	50 - 120
2,4,5-Trichlorophenol	1.33	1.06		mg/Kg		80	42 - 119
Hexachlorocyclopentadiene	1.33	<0.67	*	mg/Kg		7	10 - 116
2-Methylnaphthalene	1.33	1.15		mg/Kg		86	55 - 120
2-Nitroaniline	1.33	1.57		mg/Kg		118	52 - 121
2-Chloronaphthalene	1.33	1.22		mg/Kg		91	57 - 112
4-Chloro-3-methylphenol	1.33	1.39		mg/Kg		104	59 - 117
2,6-Dinitrotoluene	1.33	1.28		mg/Kg		96	57 - 118
2-Nitrophenol	1.33	1.26		mg/Kg		95	58 - 121
3-Nitroaniline	1.33	1.35		mg/Kg		101	20 - 144
Dimethyl phthalate	1.33	1.20		mg/Kg		90	60 - 112
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		7	10 - 110
Acenaphthylene	1.33	1.18		mg/Kg		89	57 - 116
2,4-Dinitrotoluene	1.33	1.26		mg/Kg		95	59 - 119
Acenaphthene	1.33	1.10		mg/Kg		82	52 - 113
Dibenzofuran	1.33	1.19		mg/Kg		89	59 - 110
4-Nitrophenol	2.67	1.98		mg/Kg		74	32 - 123
Fluorene	1.33	1.20		mg/Kg		90	56 - 115
4-Nitroaniline	1.33	2.03	*	mg/Kg		152	55 - 146
4-Bromophenyl phenyl ether	1.33	1.21		mg/Kg		90	61 - 124
Hexachlorobenzene	1.33	1.19		mg/Kg		90	62 - 126
Diethyl phthalate	1.33	1.32		mg/Kg		99	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.23		mg/Kg		92	61 - 111
Pentachlorophenol	2.67	0.885		mg/Kg		33	12 - 116
N-Nitrosodiphenylamine	1.33	1.25		mg/Kg		94	62 - 117
4,6-Dinitro-2-methylphenol	2.67	0.568	J	mg/Kg		21	10 - 110
Phenanthrene	1.33	1.21		mg/Kg		91	58 - 125
Anthracene	1.33	1.22		mg/Kg		92	57 - 118
Carbazole	1.33	1.48		mg/Kg		111	65 - 137
Di-n-butyl phthalate	1.33	1.29		mg/Kg		97	61 - 123
Fluoranthene	1.33	1.26		mg/Kg		94	61 - 124
Pyrene	1.33	1.19		mg/Kg		90	60 - 115
Butyl benzyl phthalate	1.33	1.31		mg/Kg		99	61 - 115
Benzo[a]anthracene	1.33	1.27		mg/Kg		95	63 - 115
Chrysene	1.33	1.20		mg/Kg		90	63 - 118
3,3'-Dichlorobenzidine	1.33	1.11		mg/Kg		83	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.36		mg/Kg		102	62 - 117
Di-n-octyl phthalate	1.33	1.43		mg/Kg		107	58 - 129
Benzo[b]fluoranthene	1.33	1.35		mg/Kg		101	61 - 123
Benzo[k]fluoranthene	1.33	1.35		mg/Kg		101	59 - 125
Benzo[a]pyrene	1.33	1.54		mg/Kg		115	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.36		mg/Kg		102	50 - 149
Dibenz(a,h)anthracene	1.33	1.36		mg/Kg		102	61 - 134
Benzo[g,h,i]perylene	1.33	1.40		mg/Kg		105	55 - 134
3 & 4 Methylphenol	1.33	1.41		mg/Kg		106	55 - 124

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: LCS 500-364515/2-A
Matrix: Solid
Analysis Batch: 364605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 364515

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	104		40 - 130
Phenol-d5	108		36 - 123
Nitrobenzene-d5	100		33 - 124
2-Fluorobiphenyl	84		42 - 115
2,4,6-Tribromophenol	85		25 - 130
Terphenyl-d14	98		25 - 150

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-363771/2-A
Matrix: Solid
Analysis Batch: 364150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 363771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cadmium	0.0500	0.0503		mg/L		101	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Manganese	0.500	0.538		mg/L		108	80 - 120

Lab Sample ID: LCS 500-363823/2-A
Matrix: Solid
Analysis Batch: 364125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 363823

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	2.00	1.83		mg/L		92	80 - 120
Beryllium	0.0500	0.0467		mg/L		93	80 - 120
Boron	1.00	0.813		mg/L		81	80 - 120
Cadmium	0.0500	0.0442		mg/L		88	80 - 120
Chromium	0.200	0.181		mg/L		91	80 - 120
Cobalt	0.500	0.456		mg/L		91	80 - 120
Iron	1.00	0.965		mg/L		96	80 - 120
Lead	0.100	0.0909		mg/L		91	80 - 120
Manganese	0.500	0.459		mg/L		92	80 - 120
Nickel	0.500	0.455		mg/L		91	80 - 120
Selenium	0.100	0.0806		mg/L		81	80 - 120
Silver	0.0500	0.0430		mg/L		86	80 - 120
Zinc	0.500	0.452	J	mg/L		90	80 - 120

Lab Sample ID: MB 500-363943/1-A
Matrix: Solid
Analysis Batch: 364126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 363943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.42	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Barium	<1.0		1.0	0.18	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Boron	<5.0		5.0	0.70	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/07/16 08:45	12/07/16 15:50	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: MB 500-363943/1-A
Matrix: Solid
Analysis Batch: 364126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 363943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<20		20	6.4	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Chromium	0.519	J	1.0	0.17	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Copper	0.237	J	1.0	0.22	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Iron	10.0	J	20	7.7	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Lead	<0.50		0.50	0.25	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Magnesium	<10		10	4.1	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Nickel	<1.0		1.0	0.27	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Potassium	<50		50	8.2	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Silver	<0.50		0.50	0.12	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Sodium	<100		100	13	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/07/16 08:45	12/07/16 15:50	1

Lab Sample ID: LCS 500-363943/2-A
Matrix: Solid
Analysis Batch: 364126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 363943

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	45.1		mg/Kg		90	80 - 120
Arsenic	10.0	8.56		mg/Kg		86	80 - 120
Barium	200	185		mg/Kg		92	80 - 120
Beryllium	5.00	4.64		mg/Kg		93	80 - 120
Boron	100	83.1		mg/Kg		83	80 - 120
Cadmium	5.00	4.58		mg/Kg		92	80 - 120
Calcium	1000	887		mg/Kg		89	80 - 120
Chromium	20.0	18.9		mg/Kg		95	80 - 120
Cobalt	50.0	46.7		mg/Kg		93	80 - 120
Copper	25.0	23.9		mg/Kg		96	80 - 120
Iron	100	97.8		mg/Kg		98	80 - 120
Lead	10.0	8.85		mg/Kg		88	80 - 120
Magnesium	1000	886		mg/Kg		89	80 - 120
Manganese	50.0	45.5		mg/Kg		91	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Potassium	1000	905		mg/Kg		91	80 - 120
Selenium	10.0	8.57		mg/Kg		86	80 - 120
Silver	5.00	4.36		mg/Kg		87	80 - 120
Sodium	1000	945		mg/Kg		94	80 - 120
Thallium	10.0	8.95		mg/Kg		90	80 - 120
Vanadium	50.0	46.4		mg/Kg		93	80 - 120
Zinc	50.0	45.6		mg/Kg		91	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: 500-120935-1 MS

Matrix: Solid

Analysis Batch: 364126

Client Sample ID: 1314V3-01-B28 (0-4.5)

Prep Type: Total/NA

Prep Batch: 363943

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<1.0	F1	26.1	5.23	F1	mg/Kg	☼	20	75 - 125
Arsenic	2.2		5.22	7.63		mg/Kg	☼	105	75 - 125
Barium	51	F1	104	125	F1	mg/Kg	☼	71	75 - 125
Beryllium	0.44		2.61	2.57		mg/Kg	☼	81	75 - 125
Boron	2.6	F1	52.2	34.3	F1	mg/Kg	☼	61	75 - 125
Cadmium	0.14	F1	2.61	2.21		mg/Kg	☼	79	75 - 125
Calcium	19000	F2	522	37400	E 4	mg/Kg	☼	3442	75 - 125
Chromium	12	B	10.4	21.2		mg/Kg	☼	88	75 - 125
Cobalt	6.7		26.1	32.7		mg/Kg	☼	100	75 - 125
Copper	11	B	13.1	22.8		mg/Kg	☼	87	75 - 125
Iron	10000	B	52.2	12600	4	mg/Kg	☼	4288	75 - 125
Lead	9.5		5.22	14.2		mg/Kg	☼	90	75 - 125
Magnesium	11000	F2	522	20100	4	mg/Kg	☼	1824	75 - 125
Manganese	180	F2	26.1	287	4	mg/Kg	☼	412	75 - 125
Nickel	17		26.1	42.1		mg/Kg	☼	94	75 - 125
Potassium	740	F1 F2	522	1590	F1	mg/Kg	☼	163	75 - 125
Selenium	0.52	F1	5.22	3.64	F1	mg/Kg	☼	60	75 - 125
Silver	<0.25	F1	2.61	1.99		mg/Kg	☼	76	75 - 125
Sodium	500		522	903		mg/Kg	☼	76	75 - 125
Thallium	<0.50		5.22	4.15		mg/Kg	☼	79	75 - 125
Vanadium	19		26.1	39.9		mg/Kg	☼	80	75 - 125
Zinc	40		26.1	68.0		mg/Kg	☼	107	75 - 125

Lab Sample ID: 500-120935-1 MSD

Matrix: Solid

Analysis Batch: 364126

Client Sample ID: 1314V3-01-B28 (0-4.5)

Prep Type: Total/NA

Prep Batch: 363943

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<1.0	F1	24.8	4.95	F1	mg/Kg	☼	20	75 - 125	5	20
Arsenic	2.2		4.95	6.28		mg/Kg	☼	83	75 - 125	20	20
Barium	51	F1	99.0	132		mg/Kg	☼	82	75 - 125	5	20
Beryllium	0.44		2.48	2.39		mg/Kg	☼	79	75 - 125	7	20
Boron	2.6	F1	49.5	28.0	F1	mg/Kg	☼	51	75 - 125	20	20
Cadmium	0.14	F1	2.48	1.94	F1	mg/Kg	☼	73	75 - 125	13	20
Calcium	19000	F2	495	12600	4 F2	mg/Kg	☼	-1387	75 - 125	99	20
Chromium	12	B	9.90	22.5		mg/Kg	☼	105	75 - 125	6	20
Cobalt	6.7		24.8	31.9		mg/Kg	☼	102	75 - 125	3	20
Copper	11	B	12.4	22.3		mg/Kg	☼	88	75 - 125	2	20
Iron	10000	B	49.5	12200	4	mg/Kg	☼	3573	75 - 125	4	20
Lead	9.5		4.95	15.5		mg/Kg	☼	121	75 - 125	9	20
Magnesium	11000	F2	495	7630	4 F2	mg/Kg	☼	-587	75 - 125	90	20
Manganese	180	F2	24.8	163	4 F2	mg/Kg	☼	-66	75 - 125	55	20
Nickel	17		24.8	42.6		mg/Kg	☼	101	75 - 125	1	20
Potassium	740	F1 F2	495	1210	F2	mg/Kg	☼	96	75 - 125	27	20
Selenium	0.52	F1	4.95	3.41	F1	mg/Kg	☼	58	75 - 125	7	20
Silver	<0.25	F1	2.48	1.66	F1	mg/Kg	☼	67	75 - 125	18	20
Sodium	500		495	923		mg/Kg	☼	85	75 - 125	2	20
Thallium	<0.50		4.95	4.18		mg/Kg	☼	84	75 - 125	1	20

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

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

Lab Sample ID: 500-120935-1 MSD
Matrix: Solid
Analysis Batch: 364126

Client Sample ID: 1314V3-01-B28 (0-4.5)
Prep Type: Total/NA
Prep Batch: 363943

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Vanadium	19		24.8	43.1		mg/Kg	☼	97	75 - 125	8	20
Zinc	40		24.8	70.3		mg/Kg	☼	122	75 - 125	3	20

Lab Sample ID: 500-120935-1 DU
Matrix: Solid
Analysis Batch: 364126

Client Sample ID: 1314V3-01-B28 (0-4.5)
Prep Type: Total/NA
Prep Batch: 363943

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<1.0	F1	<0.97		mg/Kg	☼	NC	20
Arsenic	2.2		2.46		mg/Kg	☼	13	20
Barium	51	F1	55.2		mg/Kg	☼	9	20
Beryllium	0.44		0.452		mg/Kg	☼	2	20
Boron	2.6	F1	1.88	J F5	mg/Kg	☼	31	20
Cadmium	0.14	F1	0.134		mg/Kg	☼	2	20
Calcium	19000	F2	10600	F3	mg/Kg	☼	59	20
Chromium	12	B	12.6		mg/Kg	☼	4	20
Cobalt	6.7		6.76		mg/Kg	☼	0.9	20
Copper	11	B	12.0		mg/Kg	☼	5	20
Iron	10000	B	10400		mg/Kg	☼	0	20
Lead	9.5		11.2		mg/Kg	☼	16	20
Magnesium	11000	F2	6340	F3	mg/Kg	☼	50	20
Manganese	180	F2	125	F3	mg/Kg	☼	36	20
Nickel	17		16.5		mg/Kg	☼	6	20
Potassium	740	F1 F2	624		mg/Kg	☼	17	20
Selenium	0.52	F1	<0.48		mg/Kg	☼	NC	20
Silver	<0.25	F1	<0.24		mg/Kg	☼	NC	20
Sodium	500		535		mg/Kg	☼	6	20
Thallium	<0.50		<0.48		mg/Kg	☼	NC	20
Vanadium	19		21.0		mg/Kg	☼	10	20
Zinc	40		45.7		mg/Kg	☼	13	20

Lab Sample ID: LB 500-363730/1-C
Matrix: Solid
Analysis Batch: 364125

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 363823

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 12:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 12:21	1
Boron	<0.50		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 12:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 12:21	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 12:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 12:21	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 12:21	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Zinc	0.0968	J	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 12:21	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Lab Sample ID: LB 500-363725/1-B
Matrix: Solid
Analysis Batch: 364150

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 363771

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 09:57	12/08/16 00:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 09:57	12/08/16 00:48	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 00:48	1

Lab Sample ID: 500-120935-8 MS
Matrix: Solid
Analysis Batch: 364150

Client Sample ID: 1314V3-01-B35 (14-20)
Prep Type: SPLP East
Prep Batch: 363771

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Manganese	0.42		0.500	0.945		mg/L		106	50 - 150

Lab Sample ID: 500-120935-8 DU
Matrix: Solid
Analysis Batch: 364150

Client Sample ID: 1314V3-01-B35 (14-20)
Prep Type: SPLP East
Prep Batch: 363771

Analyte	Sample Result	Sample Qualifier	DU Result	DU DU		Unit	D	RPD	Limit
				Qualifier	RPD				
Manganese	0.42		0.403			mg/L		3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-363823/2-A
Matrix: Solid
Analysis Batch: 364154

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 363823

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.431		mg/L		86	80 - 120
Thallium	0.100	0.0917		mg/L		92	80 - 120

Lab Sample ID: LB 500-363730/1-C
Matrix: Solid
Analysis Batch: 364154

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 363823

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 20:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 20:34	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-363808/12-A
Matrix: Solid
Analysis Batch: 363991

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 363808

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:48	1

Lab Sample ID: LCS 500-363808/13-A
Matrix: Solid
Analysis Batch: 363991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 363808

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Mercury	0.00200	0.00196		mg/L		98	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LB 500-363730/1-B
Matrix: Solid
Analysis Batch: 363991

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 363808

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:54	1

Lab Sample ID: 500-120935-1 MS
Matrix: Solid
Analysis Batch: 363991

Client Sample ID: 1314V3-01-B28 (0-4.5)
Prep Type: TCLP
Prep Batch: 363808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000824		mg/L		82	50 - 150

Lab Sample ID: 500-120935-1 DU
Matrix: Solid
Analysis Batch: 363991

Client Sample ID: 1314V3-01-B28 (0-4.5)
Prep Type: TCLP
Prep Batch: 363808

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

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-363688/12-A
Matrix: Solid
Analysis Batch: 363848

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 363688

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg		12/05/16 16:00	12/06/16 13:11	1

Lab Sample ID: LCS 500-363688/13-A
Matrix: Solid
Analysis Batch: 363848

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 363688

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.165		mg/Kg		99	80 - 120

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B28 (0-4.5)

Lab Sample ID: 500-120935-1

Date Collected: 12/02/16 08:30

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:01	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 14:37	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:41	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:55	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

Client Sample ID: 1314V3-01-B28 (0-4.5)

Lab Sample ID: 500-120935-1

Date Collected: 12/02/16 08:30

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 05:19	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 14:24	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:10	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:45	MJD	TAL CHI

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:08	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 14:42	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:44	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:00	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

Client Sample ID: 1314V3-01-B27 (0-8)

Lab Sample ID: 500-120935-2

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 05:44	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 17:49	AJD	TAL CHI
Total/NA	Prep	3541	DL		364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D	DL	10	364791	12/13/16 11:02	GES	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:30	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:47	MJD	TAL CHI

Client Sample ID: 1314V3-01-B27 (8-15)

Lab Sample ID: 500-120935-3

Date Collected: 12/02/16 10:00

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:15	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 14:47	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:47	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:01	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B27 (8-15)

Lab Sample ID: 500-120935-3

Date Collected: 12/02/16 10:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 06:09	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 18:15	AJD	TAL CHI
Total/NA	Prep	3541	DL2		364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D	DL2	100	364791	12/13/16 10:36	GES	TAL CHI
Total/NA	Prep	3541	DL		364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D	DL	20	364791	12/13/16 11:27	GES	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:34	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:48	MJD	TAL CHI

Client Sample ID: 1314V3-01-B27 (15-22)

Lab Sample ID: 500-120935-4

Date Collected: 12/02/16 10:05

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:22	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:15	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:51	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:03	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

Client Sample ID: 1314V3-01-B27 (15-22)

Lab Sample ID: 500-120935-4

Date Collected: 12/02/16 10:05

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 06:34	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 14:50	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:38	PJ1	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:50	MJD	TAL CHI

Client Sample ID: 1314V3-01-B35 (0-7)

Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45
Date Received: 12/02/16 16:15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:29	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:20	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:54	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:04	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

Client Sample ID: 1314V3-01-B35 (0-7)

Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45
Date Received: 12/02/16 16:15

Matrix: Solid
Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 06:59	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 15:15	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:42	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:51	MJD	TAL CHI

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45
Date Received: 12/02/16 16:15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:35	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:25	PJ1	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:58	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:06	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

Client Sample ID: 1314V3-01-B35 (0-7)D

Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 07:24	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 15:41	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:45	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:53	MJD	TAL CHI

Client Sample ID: 1314V3-01-B35 (7-14)

Lab Sample ID: 500-120935-7

Date Collected: 12/02/16 10:55

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:42	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:29	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 21:01	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:10	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Client Sample ID: 1314V3-01-B35 (7-14)

Lab Sample ID: 500-120935-7

Date Collected: 12/02/16 10:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 07:48	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 16:07	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:56	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:54	MJD	TAL CHI

Client Sample ID: 1314V3-01-B35 (14-20)

Lab Sample ID: 500-120935-8

Date Collected: 12/02/16 11:00

Matrix: Solid

Date Received: 12/02/16 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 02:05	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:34	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 21:04	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:12	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

Client Sample ID: 1314V3-01-B35 (14-20)

Lab Sample ID: 500-120935-8

Date Collected: 12/02/16 11:00

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 08:13	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 16:32	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 17:00	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:56	MJD	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Laboratory References:

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

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Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 6C
Phone: 708.534.5200 Fax: 708.534



500-120935 COC

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

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

Chain of Custody Record

Lab Job #: 500-120935

Chain of Custody Number: EGN-17

Page _____ of _____

Temperature °C of Cooler: 4.6

Client		Client Project #		Preservative		Parameter		Matrix		Comments				
LEE		1009008-6096-01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other				
Project Name		Lab Project #		Date		Time		# of Containers		Matrix				
I74		50012744												
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix				
Rock Island County, IL		50012744												
Sampler		Lab PM		Date		Time		# of Containers		Matrix				
S. Cooper		D Wright												
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOL	SUCC	Total TAC	metals	TC V/S TP	TAC Metals	PTH/1/6 S/d	Comments
1		1314V3-01-1328(0-4.5)	12-2-16	0830	2 S	S	X	X	X	X	X	X	X	64E26
2		1314V3-01-1327(0-8)	12-2-16	0955	2 S	S	X	X	X	X	X	X	X	
3		1314V3-01-1327(8-15)	12-2-16	1000	2 S	S	X	X	X	X	X	X	X	
4		1314V3-01-1327(15-22)	12-2-16	1005	2 S	S	X	X	X	X	X	X	X	
5		1314V3-01-1335(0-7)	12-2-16	1045	2 S	S	X	X	X	X	X	X	X	
6		1314V3-01-1335(0-7)D	12-2-16	1045	2 S	S	X	X	X	X	X	X	X	
7		1314V3-01-1335(7-14)	12-2-16	1055	2 S	S	X	X	X	X	X	X	X	
8		1314V3-01-1335(14-20)	12-2-16	1100	2 S	S	X	X	X	X	X	X	X	
12-2-16														

Turnaround Time Required (Business Days) 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Requested Due Date _____

Sample Disposal

Return to Client

Disposal by Lab

Archive for _____ Months

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

Relinquished By:	Company: <u>EE</u>	Date: <u>12-2-16</u>	Time: <u>1500</u>	Received By:	Company: <u>TA</u>	Date: <u>12/2/16</u>	Time: <u>1500</u>
Relinquished By:	Company: <u>TA</u>	Date: <u>12/2/16</u>	Time: <u>1615</u>	Received By:	Company: <u>TA-CRT</u>	Date: <u>12/2/16</u>	Time: <u>1615</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: TA

Shipped: _____

Hand Delivered: _____

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120935-1

Login Number: 120935

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121005-2
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout



Authorized for release by:
12/20/2016 2:30:44 PM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



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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.

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2

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10



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Sample Summary	8
Client Sample Results	9
Definitions	29
Certification Summary	30
Chain of Custody	31
Receipt Checklists	33

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Job ID: 500-121005-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-121005-2

Comments

No additional comments.

Receipt

The samples were received on 12/6/2016 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.2° C and 4.1° C.

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

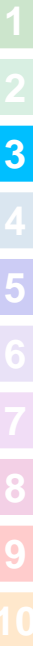
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

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

Organic Prep

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



Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (0-7)

Lab Sample ID: 500-121005-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.050		0.037	0.0052	mg/Kg	1	☼		8270D	Total/NA
Anthracene	0.011	J	0.037	0.0063	mg/Kg	1	☼		8270D	Total/NA
Fluoranthene	0.093		0.037	0.0070	mg/Kg	1	☼		8270D	Total/NA
Pyrene	0.091		0.037	0.0074	mg/Kg	1	☼		8270D	Total/NA
Benzo[a]anthracene	0.050		0.037	0.0050	mg/Kg	1	☼		8270D	Total/NA
Chrysene	0.056		0.037	0.010	mg/Kg	1	☼		8270D	Total/NA
Benzo[b]fluoranthene	0.079		0.037	0.0081	mg/Kg	1	☼		8270D	Total/NA
Benzo[k]fluoranthene	0.033	J	0.037	0.011	mg/Kg	1	☼		8270D	Total/NA
Benzo[a]pyrene	0.055		0.037	0.0073	mg/Kg	1	☼		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.025	J	0.037	0.0097	mg/Kg	1	☼		8270D	Total/NA
Dibenz(a,h)anthracene	0.0075	J	0.037	0.0072	mg/Kg	1	☼		8270D	Total/NA
Benzo[g,h,i]perylene	0.028	J	0.037	0.012	mg/Kg	1	☼		8270D	Total/NA
Arsenic	4.8		0.54	0.25	mg/Kg	1	☼		6010B	Total/NA
Barium	68		0.54	0.099	mg/Kg	1	☼		6010B	Total/NA
Beryllium	0.43		0.22	0.047	mg/Kg	1	☼		6010B	Total/NA
Boron	3.7		2.7	0.38	mg/Kg	1	☼		6010B	Total/NA
Cadmium	0.27		0.11	0.031	mg/Kg	1	☼		6010B	Total/NA
Calcium	26000		11	3.5	mg/Kg	1	☼		6010B	Total/NA
Chromium	10	B	0.54	0.093	mg/Kg	1	☼		6010B	Total/NA
Cobalt	7.1		0.27	0.061	mg/Kg	1	☼		6010B	Total/NA
Copper	33		0.54	0.12	mg/Kg	1	☼		6010B	Total/NA
Iron	12000		11	4.2	mg/Kg	1	☼		6010B	Total/NA
Lead	37		0.27	0.13	mg/Kg	1	☼		6010B	Total/NA
Magnesium	11000		5.4	2.2	mg/Kg	1	☼		6010B	Total/NA
Manganese	330		0.54	0.11	mg/Kg	1	☼		6010B	Total/NA
Nickel	16		0.54	0.15	mg/Kg	1	☼		6010B	Total/NA
Potassium	670		27	4.4	mg/Kg	1	☼		6010B	Total/NA
Selenium	0.68		0.54	0.27	mg/Kg	1	☼		6010B	Total/NA
Sodium	620		54	7.1	mg/Kg	1	☼		6010B	Total/NA
Vanadium	18		0.27	0.079	mg/Kg	1	☼		6010B	Total/NA
Zinc	60		1.1	0.34	mg/Kg	1	☼		6010B	Total/NA
Barium	1.0		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1			6010B	TCLP
Manganese	3.7		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.025		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.069	J	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.76		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.070		0.018	0.0093	mg/Kg	1	☼		7471B	Total/NA
pH	8.6		0.2	0.2	SU	1			9045D	Total/NA

Client Sample ID: 1314V3-01-B34 (7-14)

Lab Sample ID: 500-121005-14

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (7-14) (Continued)

Lab Sample ID: 500-121005-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.056		0.038	0.0053	mg/Kg	1	*	*	8270D	Total/NA
Anthracene	0.0068	J	0.038	0.0063	mg/Kg	1	*	*	8270D	Total/NA
Fluoranthene	0.10		0.038	0.0070	mg/Kg	1	*	*	8270D	Total/NA
Pyrene	0.078		0.038	0.0076	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]anthracene	0.036	J	0.038	0.0051	mg/Kg	1	*	*	8270D	Total/NA
Chrysene	0.039		0.038	0.010	mg/Kg	1	*	*	8270D	Total/NA
Benzo[b]fluoranthene	0.043		0.038	0.0082	mg/Kg	1	*	*	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.038	0.011	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]pyrene	0.030	J	0.038	0.0074	mg/Kg	1	*	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.018	J	0.038	0.0099	mg/Kg	1	*	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.020	J	0.038	0.012	mg/Kg	1	*	*	8270D	Total/NA
Arsenic	4.0		0.56	0.26	mg/Kg	1	*	*	6010B	Total/NA
Barium	55		0.56	0.10	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.40		0.22	0.048	mg/Kg	1	*	*	6010B	Total/NA
Boron	3.3		2.8	0.39	mg/Kg	1	*	*	6010B	Total/NA
Cadmium	0.21		0.11	0.032	mg/Kg	1	*	*	6010B	Total/NA
Calcium	61000		110	36	mg/Kg	10	*	*	6010B	Total/NA
Chromium	10	B	0.56	0.096	mg/Kg	1	*	*	6010B	Total/NA
Cobalt	7.0		0.28	0.063	mg/Kg	1	*	*	6010B	Total/NA
Copper	9.6		0.56	0.12	mg/Kg	1	*	*	6010B	Total/NA
Iron	12000		11	4.3	mg/Kg	1	*	*	6010B	Total/NA
Lead	8.8		0.28	0.14	mg/Kg	1	*	*	6010B	Total/NA
Magnesium	21000		5.6	2.3	mg/Kg	1	*	*	6010B	Total/NA
Manganese	360		0.56	0.11	mg/Kg	1	*	*	6010B	Total/NA
Nickel	15		0.56	0.15	mg/Kg	1	*	*	6010B	Total/NA
Potassium	720		28	4.6	mg/Kg	1	*	*	6010B	Total/NA
Selenium	0.30	J	0.56	0.28	mg/Kg	1	*	*	6010B	Total/NA
Sodium	120		56	7.4	mg/Kg	1	*	*	6010B	Total/NA
Vanadium	16		0.28	0.081	mg/Kg	1	*	*	6010B	Total/NA
Zinc	32		1.1	0.35	mg/Kg	1	*	*	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1			6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1			6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.043		0.017	0.0089	mg/Kg	1	*	*	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1			9045D	Total/NA

Client Sample ID: 1314V3-01-B34 (14-20)

Lab Sample ID: 500-121005-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Antimony	0.34	J F1	1.1	0.23	mg/Kg	1	*	*	6010B	Total/NA
Arsenic	3.0	F1 F2	0.56	0.26	mg/Kg	1	*	*	6010B	Total/NA
Barium	48		0.56	0.10	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.46		0.22	0.048	mg/Kg	1	*	*	6010B	Total/NA
Boron	2.5	J F1	2.8	0.39	mg/Kg	1	*	*	6010B	Total/NA
Cadmium	0.15		0.11	0.032	mg/Kg	1	*	*	6010B	Total/NA
Calcium	30000		11	3.6	mg/Kg	1	*	*	6010B	Total/NA
Chromium	11	B	0.56	0.096	mg/Kg	1	*	*	6010B	Total/NA
Cobalt	6.8	F1 F2	0.28	0.063	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 - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (14-20) (Continued)

Lab Sample ID: 500-121005-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	8.1		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	15000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	17	F1 F2	0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750	F1	28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J F1	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	76		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	2.7		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	3.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.35		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.017	0.0089	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121005-13	1314V3-01-B34 (0-7)	Solid	12/05/16 16:15	12/06/16 10:30
500-121005-14	1314V3-01-B34 (7-14)	Solid	12/05/16 16:20	12/06/16 10:30
500-121005-15	1314V3-01-B34 (14-20)	Solid	12/05/16 16:24	12/06/16 10:30

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (0-7)

Lab Sample ID: 500-121005-13

Date Collected: 12/05/16 16:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/06/16 13:50	12/07/16 19:27	1
Dibromofluoromethane	103		75 - 120	12/06/16 13:50	12/07/16 19:27	1
1,2-Dichloroethane-d4 (Surr)	113		69 - 134	12/06/16 13:50	12/07/16 19:27	1
Toluene-d8 (Surr)	99		75 - 123	12/06/16 13:50	12/07/16 19:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (0-7)

Lab Sample ID: 500-121005-13

Date Collected: 12/05/16 16:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Phenanthrene	0.050		0.037	0.0052	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Anthracene	0.011 J		0.037	0.0063	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Fluoranthene	0.093		0.037	0.0070	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Pyrene	0.091		0.037	0.0074	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Benzo[a]anthracene	0.050		0.037	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (0-7)

Lab Sample ID: 500-121005-13

Date Collected: 12/05/16 16:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.056		0.037	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Benzo[b]fluoranthene	0.079		0.037	0.0081	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Benzo[k]fluoranthene	0.033	J	0.037	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Benzo[a]pyrene	0.055		0.037	0.0073	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Indeno[1,2,3-cd]pyrene	0.025	J	0.037	0.0097	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Dibenz(a,h)anthracene	0.0075	J	0.037	0.0072	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Benzo[g,h,i]perylene	0.028	J	0.037	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	87		40 - 130	12/12/16 09:38	12/14/16 02:34	1
Phenol-d5	88		36 - 123	12/12/16 09:38	12/14/16 02:34	1
Nitrobenzene-d5	77		33 - 124	12/12/16 09:38	12/14/16 02:34	1
2-Fluorobiphenyl	75		42 - 115	12/12/16 09:38	12/14/16 02:34	1
2,4,6-Tribromophenol	70		25 - 130	12/12/16 09:38	12/14/16 02:34	1
Terphenyl-d14	97		25 - 150	12/12/16 09:38	12/14/16 02:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Arsenic	4.8		0.54	0.25	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Barium	68		0.54	0.099	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Beryllium	0.43		0.22	0.047	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Boron	3.7		2.7	0.38	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Cadmium	0.27		0.11	0.031	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Calcium	26000		11	3.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Chromium	10	B	0.54	0.093	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Cobalt	7.1		0.27	0.061	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Copper	33		0.54	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Iron	12000		11	4.2	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Lead	37		0.27	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Magnesium	11000		5.4	2.2	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Manganese	330		0.54	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Nickel	16		0.54	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Potassium	670		27	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Selenium	0.68		0.54	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Sodium	620		54	7.1	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Thallium	<0.54		0.54	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Vanadium	18		0.27	0.079	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Zinc	60		1.1	0.34	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.0		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:55	1
Boron	0.082	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:55	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (0-7)

Lab Sample ID: 500-121005-13

Date Collected: 12/05/16 16:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0026	J	0.0050	0.0020	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Iron	<0.40		0.40	0.20	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Manganese	3.7		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Nickel	0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Silver	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Zinc	0.069	J	0.50	0.020	mg/L	-	12/08/16 14:21	12/10/16 18:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.76		0.025	0.010	mg/L	-	12/08/16 14:20	12/11/16 04:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/08/16 14:21	12/09/16 17:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/08/16 14:21	12/09/16 17:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/08/16 12:45	12/09/16 10:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.018	0.0093	mg/Kg	☼	12/07/16 14:45	12/08/16 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/09/16 19:42	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (7-14)

Lab Sample ID: 500-121005-14

Date Collected: 12/05/16 16:20

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/06/16 13:50	12/07/16 19:52	1
Dibromofluoromethane	103		75 - 120	12/06/16 13:50	12/07/16 19:52	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/06/16 13:50	12/07/16 19:52	1
Toluene-d8 (Surr)	102		75 - 123	12/06/16 13:50	12/07/16 19:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (7-14)

Lab Sample ID: 500-121005-14

Date Collected: 12/05/16 16:20

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Phenanthrene	0.056		0.038	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Anthracene	0.0068 J		0.038	0.0063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Fluoranthene	0.10		0.038	0.0070	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Pyrene	0.078		0.038	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Benzo[a]anthracene	0.036 J		0.038	0.0051	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (7-14)

Lab Sample ID: 500-121005-14

Date Collected: 12/05/16 16:20

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.039		0.038	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Benzo[b]fluoranthene	0.043		0.038	0.0082	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Benzo[k]fluoranthene	0.015 J		0.038	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Benzo[a]pyrene	0.030 J		0.038	0.0074	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Indeno[1,2,3-cd]pyrene	0.018 J		0.038	0.0099	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Benzo[g,h,i]perylene	0.020 J		0.038	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/12/16 09:38	12/14/16 00:08	1
Phenol-d5	98		36 - 123	12/12/16 09:38	12/14/16 00:08	1
Nitrobenzene-d5	85		33 - 124	12/12/16 09:38	12/14/16 00:08	1
2-Fluorobiphenyl	84		42 - 115	12/12/16 09:38	12/14/16 00:08	1
2,4,6-Tribromophenol	47		25 - 130	12/12/16 09:38	12/14/16 00:08	1
Terphenyl-d14	104		25 - 150	12/12/16 09:38	12/14/16 00:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Arsenic	4.0		0.56	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Barium	55		0.56	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Beryllium	0.40		0.22	0.048	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Boron	3.3		2.8	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Cadmium	0.21		0.11	0.032	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Calcium	61000		110	36	mg/Kg	☼	12/08/16 15:09	12/09/16 23:26	10
Chromium	10 B		0.56	0.096	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Cobalt	7.0		0.28	0.063	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Copper	9.6		0.56	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Iron	12000		11	4.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Lead	8.8		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Magnesium	21000		5.6	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Manganese	360		0.56	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Nickel	15		0.56	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Potassium	720		28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Selenium	0.30 J		0.56	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Sodium	120		56	7.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Vanadium	16		0.28	0.081	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Zinc	32		1.1	0.35	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.53		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 19:02	1
Boron	0.065 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:02	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (7-14)

Lab Sample ID: 500-121005-14

Date Collected: 12/05/16 16:20

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 19:02	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 19:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 19:02	1
Manganese	1.1		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Nickel	0.010	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 19:02	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 19:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.21		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 04:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 17:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/08/16 12:45	12/09/16 10:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043		0.017	0.0089	mg/Kg	☼	12/07/16 14:45	12/08/16 12:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			12/09/16 19:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (14-20)

Lab Sample ID: 500-121005-15

Date Collected: 12/05/16 16:24

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1,1,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/06/16 13:50	12/07/16 20:16	1
Dibromofluoromethane	103		75 - 120	12/06/16 13:50	12/07/16 20:16	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/06/16 13:50	12/07/16 20:16	1
Toluene-d8 (Surr)	103		75 - 123	12/06/16 13:50	12/07/16 20:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (14-20)

Lab Sample ID: 500-121005-15

Date Collected: 12/05/16 16:24

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (14-20)

Lab Sample ID: 500-121005-15

Date Collected: 12/05/16 16:24

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		40 - 130	12/12/16 09:38	12/14/16 00:38	1
Phenol-d5	81		36 - 123	12/12/16 09:38	12/14/16 00:38	1
Nitrobenzene-d5	71		33 - 124	12/12/16 09:38	12/14/16 00:38	1
2-Fluorobiphenyl	71		42 - 115	12/12/16 09:38	12/14/16 00:38	1
2,4,6-Tribromophenol	64		25 - 130	12/12/16 09:38	12/14/16 00:38	1
Terphenyl-d14	87		25 - 150	12/12/16 09:38	12/14/16 00:38	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J F1	1.1	0.23	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Arsenic	3.0	F1 F2	0.56	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Barium	48		0.56	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Beryllium	0.46		0.22	0.048	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Boron	2.5	J F1	2.8	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Cadmium	0.15		0.11	0.032	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Calcium	30000		11	3.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Chromium	11	B	0.56	0.096	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Cobalt	6.8	F1 F2	0.28	0.063	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Copper	11		0.56	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Iron	12000		11	4.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Lead	8.1		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Magnesium	15000		5.6	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Manganese	250		0.56	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Nickel	17	F1 F2	0.56	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Potassium	750	F1	28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Selenium	0.41	J F1	0.56	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Silver	<0.28	F1	0.28	0.065	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Sodium	76		56	7.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Vanadium	17		0.28	0.082	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Zinc	32		1.1	0.35	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 19:08	1
Boron	0.051	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:08	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B34 (14-20)

Lab Sample ID: 500-121005-15

Date Collected: 12/05/16 16:24

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 19:08	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
Iron	2.7		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 19:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 19:08	1
Manganese	3.9		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
Nickel	0.033		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 19:08	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
Zinc	0.023	J	0.50	0.020	mg/L		12/08/16 14:21	12/10/16 19:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.35		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 04:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 17:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:33	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/08/16 12:45	12/09/16 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.017	0.0089	mg/Kg	☼	12/07/16 14:45	12/08/16 12:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			12/09/16 19:49	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

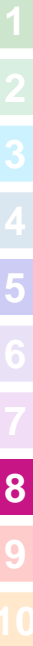
Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

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

Chain of Custody Record

Lab Job #: 500-121005
 Chain of Custody Number: EA46-19
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative							Preservative Key		
Project Name		Project Location/State		Parameter							Comments		
Lab ID		Sample ID		Sampling		# of Containers	Matrix	Voc	Sicc	TEMP THE MATH	TEMP THE MATH	PHYSICAL	
MS/MSD		Date	Time										
EE		1009008-0076-01									1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
ITN		Rab Island Cnty, IL		SOX12744									
S. Cooper		Lab PM D Wright											
11		1314V3-01-B11 (0-8)	12/5/16	1505	2	S		X	X	X	X	X	
12		1314V3-01-B11 (8-15)	12/5/16	1515	2	S		X	X	X	X	X	64C08

Turnaround Time Required (Business Days)

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

Requested Due Date _____

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months

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

Relinquished By: <u>[Signature]</u>	Company: <u>EE</u>	Date: <u>12/5/16</u>	Time: _____	Received By: <u>[Signature]</u>	Company: <u>TA-CERT</u>	Date: <u>12/6/16</u>	Time: <u>1030</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: _____
 Shipped: FedEx
 Hand Delivered: _____

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

Client Comments:

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

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

Chain of Custody Record

Lab Job #: 500-121005
 Chain of Custody Number: EN6-20
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
EE		009098 0046-01									
Project Name		Lab Project #		# of Containers		Matrix					
IT4		50012744									
Project Location/State		Lab PM									
Rock Island County, IL		D. Wang									
Sampler											
S. Camp											
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
13		1314V3-01-1334(0-7)	12-5-16	1615	2	S	VOL				
14		1314V3-01-1334(7-14)	12-5-16	1620	2	S	SVOL	TOP THE WORK	END OF THE WORK		
15		1314V3-01-1334(14-20)	12-5-16	1624	2	S					

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

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

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EE	12-5-16	1715	Sherril Scott	STA-CHE	12/6/16	1030
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
 Shipped: Fed-Ex
 Hand Delivered: _____

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

Client Comments: _____
 Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-121005-2

Login Number: 121005

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1,1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121261-1
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
12/23/2016 3:25:31 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

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

LINKS

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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



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Sample Summary	7
Client Sample Results	8
Definitions	24
Certification Summary	25
Chain of Custody	26
Receipt Checklists	27

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Job ID: 500-121261-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-121261-1**

Comments

No additional comments.

Receipt

The samples were received on 12/9/2016 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.6° C and 3.8° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 365830 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-365830/2-A)

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

Metals

Method(s) 6010B: The laboratory blank (LB) for preparation batch 500-365091 and 500-365242 contained Lead above the reporting limit (RL). The samples 1314V3-01-B36 (0-8) (500-121261-1), 1314V3-01-B36 (16-24) (500-121261-3) and 1314V3-01-B36 (24-28) (500-121261-4) associated with this LB did not contain the target compound; therefore, re-extraction and/or re-analysis of the samples were not performed.

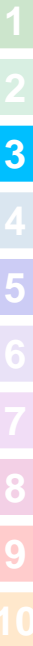
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

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

Organic Prep

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



Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (0-8)

Lab Sample ID: 500-121261-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.0052	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.0092	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.60	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.5		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.53	0.096	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	0.80	J	2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	4000	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.6		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.9		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2600		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	140		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	880		26	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.27	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.54		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.69		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.050	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0036	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	6.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.025	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.73		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038	B	0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B36 (8-16)

Lab Sample ID: 500-121261-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.041		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0086	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.058		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.054		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.029	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.036	J	0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.014	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.029	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.017	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0087	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.34	J	1.1	0.24	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 - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (8-16) (Continued)

Lab Sample ID: 500-121261-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	5.3		0.57	0.27	mg/Kg	1		☼	6010B	Total/NA
Barium	48		0.57	0.11	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.50		0.23	0.050	mg/Kg	1		☼	6010B	Total/NA
Boron	3.2		2.9	0.40	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.31		0.11	0.033	mg/Kg	1		☼	6010B	Total/NA
Calcium	21000	B	11	3.7	mg/Kg	1		☼	6010B	Total/NA
Chromium	13	B	0.57	0.099	mg/Kg	1		☼	6010B	Total/NA
Cobalt	6.5		0.29	0.065	mg/Kg	1		☼	6010B	Total/NA
Copper	13		0.57	0.12	mg/Kg	1		☼	6010B	Total/NA
Iron	16000		11	4.4	mg/Kg	1		☼	6010B	Total/NA
Lead	8.7		0.29	0.14	mg/Kg	1		☼	6010B	Total/NA
Magnesium	12000		5.7	2.3	mg/Kg	1		☼	6010B	Total/NA
Manganese	600		0.57	0.11	mg/Kg	1		☼	6010B	Total/NA
Nickel	14		0.57	0.16	mg/Kg	1		☼	6010B	Total/NA
Potassium	1200		29	4.7	mg/Kg	1		☼	6010B	Total/NA
Sodium	92		57	7.6	mg/Kg	1		☼	6010B	Total/NA
Thallium	1.0		0.57	0.28	mg/Kg	1		☼	6010B	Total/NA
Vanadium	24		0.29	0.084	mg/Kg	1		☼	6010B	Total/NA
Zinc	32		1.1	0.36	mg/Kg	1		☼	6010B	Total/NA
Barium	1.1		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.093	J	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0038	J	0.0050	0.0020	mg/L	1			6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1			6010B	TCLP
Lead	0.011		0.0075	0.0075	mg/L	1			6010B	TCLP
Manganese	10		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.13	J	0.50	0.020	mg/L	1			6010B	TCLP
Lead	0.069		0.0075	0.0075	mg/L	1			6010B	SPLP East
Manganese	0.59		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.033	B	0.017	0.0088	mg/Kg	1		☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1			9045D	Total/NA

Client Sample ID: 1314V3-01-B36 (16-24)

Lab Sample ID: 500-121261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Antimony	0.30	J	1.1	0.23	mg/Kg	1		☼	6010B	Total/NA
Arsenic	3.4		0.56	0.26	mg/Kg	1		☼	6010B	Total/NA
Barium	52		0.56	0.10	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.39		0.22	0.048	mg/Kg	1		☼	6010B	Total/NA
Boron	2.8		2.8	0.39	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.24		0.11	0.032	mg/Kg	1		☼	6010B	Total/NA
Calcium	38000	B	11	3.6	mg/Kg	1		☼	6010B	Total/NA
Chromium	9.7	B	0.56	0.096	mg/Kg	1		☼	6010B	Total/NA
Cobalt	7.4		0.28	0.063	mg/Kg	1		☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1		☼	6010B	Total/NA
Iron	12000		11	4.3	mg/Kg	1		☼	6010B	Total/NA
Lead	6.5		0.28	0.14	mg/Kg	1		☼	6010B	Total/NA
Magnesium	18000		5.6	2.3	mg/Kg	1		☼	6010B	Total/NA
Manganese	370		0.56	0.11	mg/Kg	1		☼	6010B	Total/NA
Nickel	15		0.56	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 - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (16-24) (Continued)

Lab Sample ID: 500-121261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1000		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	95		56	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.68		0.56	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	25		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0029	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.57		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031	B	0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B36 (24-28)

Lab Sample ID: 500-121261-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	25		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.23		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	3.2		2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	47000	B	11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.5	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.9		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	6.7		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	7400		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	4.3		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.2		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	650		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.42	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.5		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	18		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0030	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.066	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023	B	0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121261-1	1314V3-01-B36 (0-8)	Solid	12/08/16 14:30	12/09/16 10:00
500-121261-2	1314V3-01-B36 (8-16)	Solid	12/08/16 14:35	12/09/16 10:00
500-121261-3	1314V3-01-B36 (16-24)	Solid	12/08/16 14:40	12/09/16 10:00
500-121261-4	1314V3-01-B36 (24-28)	Solid	12/08/16 15:10	12/09/16 10:00

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (0-8)

Lab Sample ID: 500-121261-1

Date Collected: 12/08/16 14:30

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Vinyl acetate	<0.0047		0.0047	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/09/16 17:53	12/11/16 12:48	1
Dibromofluoromethane	102		75 - 120	12/09/16 17:53	12/11/16 12:48	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/09/16 17:53	12/11/16 12:48	1
Toluene-d8 (Surr)	101		75 - 123	12/09/16 17:53	12/11/16 12:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (0-8)

Lab Sample ID: 500-121261-1

Date Collected: 12/08/16 14:30

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dinitrophenol	<0.75	*	0.75	0.66	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[a]anthracene	0.0052	J	0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (0-8)

Lab Sample ID: 500-121261-1

Date Collected: 12/08/16 14:30

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[b]fluoranthene	0.0092	J	0.037	0.0081	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/19/16 16:12	12/20/16 12:43	1
Phenol-d5	106		36 - 123	12/19/16 16:12	12/20/16 12:43	1
Nitrobenzene-d5	88		33 - 124	12/19/16 16:12	12/20/16 12:43	1
2-Fluorobiphenyl	87		42 - 115	12/19/16 16:12	12/20/16 12:43	1
2,4,6-Tribromophenol	67		25 - 130	12/19/16 16:12	12/20/16 12:43	1
Terphenyl-d14	104		25 - 150	12/19/16 16:12	12/20/16 12:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J	1.1	0.22	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Arsenic	4.5		0.53	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Barium	31		0.53	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Beryllium	0.52		0.21	0.046	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Boron	0.80	J	2.6	0.37	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Cadmium	0.18		0.11	0.031	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Calcium	4000	B	11	3.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Chromium	12	B	0.53	0.091	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Cobalt	5.6		0.26	0.060	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Copper	13		0.53	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Iron	15000		11	4.1	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Lead	7.9		0.26	0.13	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Magnesium	2600		5.3	2.1	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Manganese	140		0.53	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Nickel	12		0.53	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Potassium	880		26	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Selenium	0.27	J	0.53	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Sodium	370		53	7.0	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Thallium	0.54		0.53	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Vanadium	15		0.26	0.077	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Zinc	30		1.1	0.33	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.69		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:35	1
Boron	0.050	J	0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:35	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (0-8)

Lab Sample ID: 500-121261-1

Date Collected: 12/08/16 14:30

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0036	J	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Cobalt	0.037		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Manganese	6.7		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Nickel	0.039		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Zinc	0.025	J	0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.73		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 04:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 18:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:06	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 10:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038	B	0.018	0.0096	mg/Kg	☼	12/14/16 16:00	12/15/16 12:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/14/16 15:25	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (8-16)

Lab Sample ID: 500-121261-2

Date Collected: 12/08/16 14:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/09/16 17:53	12/11/16 13:13	1
Dibromofluoromethane	96		75 - 120	12/09/16 17:53	12/11/16 13:13	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	12/09/16 17:53	12/11/16 13:13	1
Toluene-d8 (Surr)	102		75 - 123	12/09/16 17:53	12/11/16 13:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (8-16)

Lab Sample ID: 500-121261-2

Date Collected: 12/08/16 14:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Phenanthrene	0.041		0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Anthracene	0.0086	J	0.038	0.0064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Fluoranthene	0.058		0.038	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Pyrene	0.054		0.038	0.0077	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Benzo[a]anthracene	0.029	J	0.038	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (8-16)

Lab Sample ID: 500-121261-2

Date Collected: 12/08/16 14:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Benzo[b]fluoranthene	0.036	J	0.038	0.0083	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Benzo[k]fluoranthene	0.014	J	0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Benzo[a]pyrene	0.029	J	0.038	0.0075	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Indeno[1,2,3-cd]pyrene	0.017	J	0.038	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Dibenz(a,h)anthracene	0.0087	J	0.038	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Benzo[g,h,i]perylene	0.013	J	0.038	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/19/16 16:12	12/20/16 13:09	1
Phenol-d5	83		36 - 123	12/19/16 16:12	12/20/16 13:09	1
Nitrobenzene-d5	82		33 - 124	12/19/16 16:12	12/20/16 13:09	1
2-Fluorobiphenyl	78		42 - 115	12/19/16 16:12	12/20/16 13:09	1
2,4,6-Tribromophenol	74		25 - 130	12/19/16 16:12	12/20/16 13:09	1
Terphenyl-d14	96		25 - 150	12/19/16 16:12	12/20/16 13:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.1	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Arsenic	5.3		0.57	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Barium	48		0.57	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Beryllium	0.50		0.23	0.050	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Boron	3.2		2.9	0.40	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Cadmium	0.31		0.11	0.033	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Calcium	21000	B	11	3.7	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Chromium	13	B	0.57	0.099	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Cobalt	6.5		0.29	0.065	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Copper	13		0.57	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Iron	16000		11	4.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Lead	8.7		0.29	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Magnesium	12000		5.7	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Manganese	600		0.57	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Nickel	14		0.57	0.16	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Potassium	1200		29	4.7	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Sodium	92		57	7.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Thallium	1.0		0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Vanadium	24		0.29	0.084	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Zinc	32		1.1	0.36	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.1		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:39	1
Boron	0.093	J	0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:39	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (8-16)

Lab Sample ID: 500-121261-2

Date Collected: 12/08/16 14:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0038	J	0.0050	0.0020	mg/L		12/15/16 08:57	12/15/16 23:39	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:39	1
Cobalt	0.027		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:39	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 08:57	12/15/16 23:39	1
Lead	0.011		0.0075	0.0075	mg/L		12/19/16 08:53	12/19/16 22:10	1
Manganese	10		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:39	1
Nickel	0.030		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:39	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/15/16 23:39	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:39	1
Zinc	0.13	J	0.50	0.020	mg/L		12/15/16 08:57	12/15/16 23:39	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.069		0.0075	0.0075	mg/L		12/14/16 14:09	12/16/16 05:06	1
Manganese	0.59		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 05:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/15/16 08:57	12/15/16 18:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 18:11	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/15/16 13:00	12/16/16 10:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	B	0.017	0.0088	mg/Kg	☼	12/14/16 16:00	12/15/16 12:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/14/16 15:30	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (16-24)

Lab Sample ID: 500-121261-3

Date Collected: 12/08/16 14:40

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/09/16 17:53	12/11/16 13:38	1
Dibromofluoromethane	99		75 - 120	12/09/16 17:53	12/11/16 13:38	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/09/16 17:53	12/11/16 13:38	1
Toluene-d8 (Surr)	101		75 - 123	12/09/16 17:53	12/11/16 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (16-24)

Lab Sample ID: 500-121261-3

Date Collected: 12/08/16 14:40

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dinitrophenol	<0.75 *		0.75	0.65	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (16-24)

Lab Sample ID: 500-121261-3

Date Collected: 12/08/16 14:40

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/19/16 16:12	12/20/16 13:34	1
Phenol-d5	104		36 - 123	12/19/16 16:12	12/20/16 13:34	1
Nitrobenzene-d5	87		33 - 124	12/19/16 16:12	12/20/16 13:34	1
2-Fluorobiphenyl	90		42 - 115	12/19/16 16:12	12/20/16 13:34	1
2,4,6-Tribromophenol	67		25 - 130	12/19/16 16:12	12/20/16 13:34	1
Terphenyl-d14	107		25 - 150	12/19/16 16:12	12/20/16 13:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Arsenic	3.4		0.56	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Barium	52		0.56	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Beryllium	0.39		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Boron	2.8		2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Cadmium	0.24		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Calcium	38000	B	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Chromium	9.7	B	0.56	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Cobalt	7.4		0.28	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Copper	11		0.56	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Iron	12000		11	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Lead	6.5		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Magnesium	18000		5.6	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Manganese	370		0.56	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Nickel	15		0.56	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Potassium	1000		28	4.5	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Sodium	95		56	7.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Thallium	0.68		0.56	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Vanadium	14		0.28	0.081	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Zinc	25		1.1	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.55		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:44	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:44	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (16-24)

Lab Sample ID: 500-121261-3

Date Collected: 12/08/16 14:40

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0029	J	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Cobalt	0.015	J	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Manganese	3.4		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Nickel	0.022	J	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.57		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 05:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 18:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 10:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	B	0.019	0.0098	mg/Kg	☼	12/14/16 16:00	12/15/16 13:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU	-		12/14/16 15:33	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (24-28)

Lab Sample ID: 500-121261-4

Date Collected: 12/08/16 15:10

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 120	12/09/16 17:53	12/12/16 15:31	1
Dibromofluoromethane	97		75 - 120	12/09/16 17:53	12/12/16 15:31	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/09/16 17:53	12/12/16 15:31	1
Toluene-d8 (Surr)	105		75 - 123	12/09/16 17:53	12/12/16 15:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (24-28)

Lab Sample ID: 500-121261-4

Date Collected: 12/08/16 15:10

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dinitrophenol	<0.76	*	0.76	0.66	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (24-28)

Lab Sample ID: 500-121261-4

Date Collected: 12/08/16 15:10

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	95		40 - 130	12/19/16 16:12	12/20/16 13:59	1
Phenol-d5	91		36 - 123	12/19/16 16:12	12/20/16 13:59	1
Nitrobenzene-d5	85		33 - 124	12/19/16 16:12	12/20/16 13:59	1
2-Fluorobiphenyl	83		42 - 115	12/19/16 16:12	12/20/16 13:59	1
2,4,6-Tribromophenol	61		25 - 130	12/19/16 16:12	12/20/16 13:59	1
Terphenyl-d14	96		25 - 150	12/19/16 16:12	12/20/16 13:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Arsenic	3.3		0.57	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Barium	25		0.57	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Beryllium	0.23		0.23	0.049	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Boron	3.2		2.8	0.40	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Cadmium	0.15		0.11	0.033	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Calcium	47000	B	11	3.7	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Chromium	5.5	B	0.57	0.098	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Cobalt	2.9		0.28	0.064	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Copper	6.7		0.57	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Iron	7400		11	4.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Lead	4.3		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Magnesium	25000		5.7	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Manganese	250		0.57	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Nickel	7.2		0.57	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Potassium	650		28	4.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Silver	<0.28		0.28	0.067	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Sodium	200		57	7.5	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Thallium	0.42	J	0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Vanadium	9.5		0.28	0.083	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Zinc	18		1.1	0.36	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.54		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:49	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:49	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Client Sample ID: 1314V3-01-B36 (24-28)

Lab Sample ID: 500-121261-4

Date Collected: 12/08/16 15:10

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0030	J	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Cobalt	0.015	J	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Manganese	3.4		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Nickel	0.023	J	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Zinc	0.066	J	0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.13		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 18:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 18:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 10:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	B	0.019	0.010	mg/Kg	☼	12/14/16 16:00	12/15/16 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU	-		12/14/16 15:36	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

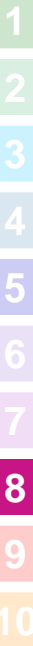
Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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



TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534



500-121261 COC

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

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

Chain of Custody Record

Lab Job #: 500-121261

Chain of Custody Number: EP46-3c

Page _____ of _____

Temperature °C of Cooler: 3.6, 3.8

Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Preservative	Parameter	Total TSS	Temp 1 STD	Total Metals	pH / % Solids	Comments
			Date	Time									
1		1314V3-01-B36 (0-8)	12-8-16	1430	2	S		X	X	X	X	X	Cape 26
2		1314V3-01-B36 (8-16)	12-8-16	1435	2	S		X	X	X	X	X	
3		1314V3-01-B36 (16-24)	12-8-16	1440	2	S		X	X	X	X	X	
4		1314V3-01-B36 (24-28)	12-8-16	1510	2	S		X	X	X	X	X	
12-8-16													

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

Turnaround Time Required (Business Days)

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

Sample Disposal

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EE	12-8-16	1700	Sherrill Scott	TA-OHI	12/9/16	1800
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
Shipped: Fed-Ex
Hand Delivered: _____

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

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-121261-1

Login Number: 121261

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6,3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





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 74 (I-74) Office Phone Number, if available: _____

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

1800 7th Avenue (ISGS #1314V3-66)

City: Moline State: IL Zip Code: 61265

County: Rock Island Township: Moline

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

Latitude: 41.50559 Longitude: -90.51028

(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: 819 Depot Avenue

Street Address: 819 Depot Avenue

PO Box: _____

PO Box: _____

City: Dixon State: IL

City: Dixon State: IL

Zip Code: 61071 Phone: 815-284-5450

Zip Code: 61071 Phone: 815-284-5450

Contact: Heath Jordan

Contact: Heath Jordan

Email, if available: Heath.Jordan@illinois.gov

Email, if available: Heath.Jordan@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

Project Name: FAI 74 (I-74)

Latitude: 41.50559 Longitude: -90.51028

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 1314V3-66-B01 and -B02 were sampled within the construction zone adjacent to ISGS #1314V3-66 (Scottish Rite Masonic Center). Refer to PSI Report for ISGS #1314V3-66 (Scottish Rite Masonic Center) including Table 4-4, and Figure 4-1.

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

See attached data summary table and associated laboratory data package J120792-1.

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

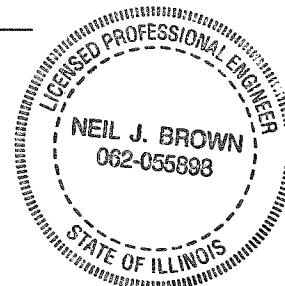
Printed Name:

Neil J. Brown

3/15/17

Date:

Licensed Professional Engineer or
 Licensed Professional Geologist Signature:



Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01

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.

J = Estimated value.

U = Analyte was analyzed for but not detected.

Criteria Qualifiers and Shading

† = Concentration exceeds the most stringent MAC.

m = Concentration exceeds the MAC for an MSA.

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

 = Concentration exceeds applicable comparison criteria.

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-66 (Scottish Rite Masonic Center)			Comparison Criteria					
	1314V3-66-B01		1314V3-66-B02	MACs			TACO		
BORING	1314V3-66-B01 (0-7)		1314V3-66-B01 (0-7)D						
SAMPLE	1314V3-66-B01 (0-7)		1314V3-66-B02 (0-6)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-7	0-7	0-6						
pH	8.6	8.8	8.2						
VOCs (None Detected)									
SVOCs (mg/kg)									
Benzo(a)anthracene	ND U	0.029 J	0.011 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.04	0.016 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	0.059	0.029 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND UJ	0.023 J	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.022 J	ND U	9	--	--	9	1,700	--
Chrysene	ND U	0.039	0.017 J	88	--	--	88	17,000	--
Fluoranthene	ND U	0.088	0.035 J	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.029 J	0.015 J	0.9	1.6	0.9	1.6	170	--
Phenanthrene	ND U	0.033 J	0.012 J	--	--	--	--	--	--
Pyrene	ND U	0.065	0.027 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	ND U	0.25 J	ND U	5	--	--	31	82	--
Arsenic	7.7	5.8	4.5	11.3	13	--	13	61	--
Barium	58	58	91	1,500	--	--	5,500	14,000	--
Beryllium	0.49	0.48	0.53	22	--	--	160	410	--
Boron	2.5 J	2.5 J	2 J	40	--	--	16,000	41,000	--
Cadmium	0.19	0.14	0.24	5.2	--	--	78	200	--
Calcium	15,000	11,000	2,600	--	--	--	--	--	--
Chromium	10	11	11	21	--	--	230	690	--
Cobalt	6.2	6.1	6.6	20	--	--	4,700	12,000	--
Copper	11	9.6	11	2,900	--	--	2,900	8,200	--
Iron	13,000	13,000	15,000	15,000	15,900	--	--	--	--
Lead	8.5	15	7.8	107	--	--	400	700	--
Magnesium	9,600	5,800	1,800	325,000	--	--	--	730,000	--
Manganese	360	350	670 †m	630	636	--	1,600	4,100	--
Mercury	0.021	0.028	0.018 J	0.89	--	--	10	0.1	--
Nickel	14	12	18	100	--	--	1,600	4,100	--
Potassium	770	740	840	--	--	--	--	--	--
Selenium	ND U	0.31 J	0.47 J	1.3	--	--	390	1,000	--
Sodium	430	420	140	--	--	--	--	--	--
Thallium	1.1	0.94	1.5	2.6	--	--	6.3	160	--
Vanadium	23	22	17	550	--	--	550	1,400	--
Zinc	28	28	40	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.65	0.65	0.32 J	--	--	--	--	--	2
Boron	0.053 J	0.087 J	ND U	--	--	--	--	--	2
Lead	ND U	0.008 L	ND U	--	--	--	--	--	0.0075
Manganese	0.27 L	0.14	ND U	--	--	--	--	--	0.15
Selenium	0.021 J	ND U	ND U	--	--	--	--	--	0.05
SPL Metals (mg/L)									
Lead	NA	0.073 J L	NA	--	--	--	--	--	0.0075
Manganese	0.58 J L	NA	NA	--	--	--	--	--	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: 500-120792-1
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
12/13/2016 4:33:05 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

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

LINKS

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results through
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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.

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Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Sample Summary	7
Client Sample Results	8
Definitions	20
Certification Summary	21
Chain of Custody	22
Receipt Checklists	23

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Job ID: 500-120792-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120792-1

Comments

No additional comments.

Receipt

The samples were received on 12/1/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The following sample contained one acid surrogate outside acceptance limits: 1314V3-66-B01 (0-7) (500-120792-1). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 364109 had 1 analyte outside control limits: Hexachlorocyclopentadiene. These results have been reported and qualified. (LCS 500-364109/2-A)

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-120792-E-1-N MS) and (500-120792-E-1-O MSD)

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

Metals

Method(s) 6010B: The instrument blank for analytical batch 500-363473 at line 100 contained Iron greater than the reporting limit (RL); associated samples were not reanalyzed because they contained Iron greater than 10 times the amount found in the instrument blank. The data have been qualified and reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)

Lab Sample ID: 500-120792-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.7		0.61	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.61	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000	B	12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.61	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.2		0.30	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.61	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	12	4.7	mg/Kg	1	☼	6010B	Total/NA
Lead	8.5		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9600		6.1	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.61	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	14	B	0.61	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		30	5.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	430		61	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.30	0.089	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.033	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.58		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-66-B01 (0-7)D

Lab Sample ID: 500-120792-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.033	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.088		0.039	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.065		0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.029	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.039		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.059		0.039	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.022	J	0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.040		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.029	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.023	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.8		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	11000	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.29	0.065	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)D (Continued)

Lab Sample ID: 500-120792-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	9.6		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5800		5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	740		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	420		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.94		0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.087	J	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.0080		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.073		0.0075	0.0075	mg/L	1		6010B	SPLP East
Mercury	0.028		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-66-B02 (0-6)

Lab Sample ID: 500-120792-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.012	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.035	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.027	J	0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.011	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.017	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.029	J	0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.016	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.5		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	91		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	2600	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.6		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B ^	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	7.8		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	670		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	18	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	840		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		58	7.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.5		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.085	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B02 (0-6) (Continued)

Lab Sample ID: 500-120792-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	40		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.018	J	0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120792-1	1314V3-66-B01 (0-7)	Solid	11/30/16 09:15	12/01/16 09:25
500-120792-2	1314V3-66-B01 (0-7)D	Solid	11/30/16 09:15	12/01/16 09:25
500-120792-3	1314V3-66-B02 (0-6)	Solid	11/30/16 09:30	12/01/16 09:25

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)

Lab Sample ID: 500-120792-1

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/01/16 16:55	12/06/16 18:09	1
Dibromofluoromethane	108		75 - 120	12/01/16 16:55	12/06/16 18:09	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/06/16 18:09	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/06/16 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)

Lab Sample ID: 500-120792-1

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachlorocyclopentadiene	<0.82	* F1	0.82	0.23	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dinitrophenol	<0.82	F1	0.82	0.72	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Pentachlorophenol	<0.82	F1	0.82	0.65	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4,6-Dinitro-2-methylphenol	<0.82	F1	0.82	0.33	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.077	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)

Lab Sample ID: 500-120792-1

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Dibenz(a,h)anthracene	<0.040	F1	0.040	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[g,h,i]perylene	<0.040	F1	0.040	0.013	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	113		40 - 130	12/08/16 07:23	12/09/16 13:54	1
Phenol-d5	124	X	36 - 123	12/08/16 07:23	12/09/16 13:54	1
Nitrobenzene-d5	108		33 - 124	12/08/16 07:23	12/09/16 13:54	1
2-Fluorobiphenyl	92		42 - 115	12/08/16 07:23	12/09/16 13:54	1
2,4,6-Tribromophenol	86		25 - 130	12/08/16 07:23	12/09/16 13:54	1
Terphenyl-d14	103		25 - 150	12/08/16 07:23	12/09/16 13:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Arsenic	7.7		0.61	0.28	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Barium	58		0.61	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Beryllium	0.49		0.24	0.053	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Boron	2.5	J	3.0	0.42	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Cadmium	0.19		0.12	0.035	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Calcium	15000	B	12	3.9	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Chromium	10	B	0.61	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 22:16	1
Cobalt	6.2		0.30	0.069	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Copper	11		0.61	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Iron	13000	B ^	12	4.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Lead	8.5		0.30	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Magnesium	9600		6.1	2.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Manganese	360		0.61	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Nickel	14	B	0.61	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Potassium	770		30	5.0	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Selenium	<0.61		0.61	0.30	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Sodium	430		61	8.0	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Thallium	1.1		0.61	0.30	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Vanadium	23		0.30	0.089	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Zinc	28		1.2	0.38	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.65		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:23	1
Boron	0.053	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)

Lab Sample ID: 500-120792-1

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 16:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 16:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 16:23	1
Manganese	0.27		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Selenium	0.021	J	0.050	0.020	mg/L		12/05/16 08:13	12/05/16 16:23	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Zinc	0.033	J B	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.58		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 01:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:44	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 11:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.018	0.0094	mg/Kg	☼	12/02/16 14:45	12/05/16 11:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			12/02/16 18:26	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)D

Lab Sample ID: 500-120792-2

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 120	12/01/16 16:55	12/06/16 18:34	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/06/16 18:34	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/06/16 18:34	1
Toluene-d8 (Surr)	107		75 - 123	12/01/16 16:55	12/06/16 18:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)D

Lab Sample ID: 500-120792-2

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachlorocyclopentadiene	<0.80	*	0.80	0.23	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Phenanthrene	0.033	J	0.039	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Fluoranthene	0.088		0.039	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Pyrene	0.065		0.039	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Benzo[a]anthracene	0.029	J	0.039	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)D

Lab Sample ID: 500-120792-2

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.039		0.039	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Benzo[b]fluoranthene	0.059		0.039	0.0086	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Benzo[k]fluoranthene	0.022 J		0.039	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Benzo[a]pyrene	0.040		0.039	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Indeno[1,2,3-cd]pyrene	0.029 J		0.039	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Benzo[g,h,i]perylene	0.023 J		0.039	0.013	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		40 - 130	12/08/16 07:23	12/09/16 14:20	1
Phenol-d5	98		36 - 123	12/08/16 07:23	12/09/16 14:20	1
Nitrobenzene-d5	85		33 - 124	12/08/16 07:23	12/09/16 14:20	1
2-Fluorobiphenyl	74		42 - 115	12/08/16 07:23	12/09/16 14:20	1
2,4,6-Tribromophenol	69		25 - 130	12/08/16 07:23	12/09/16 14:20	1
Terphenyl-d14	80		25 - 150	12/08/16 07:23	12/09/16 14:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.25 J		1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Arsenic	5.8		0.58	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Barium	58		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Beryllium	0.48		0.23	0.050	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Boron	2.5 J		2.9	0.40	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Cadmium	0.14		0.12	0.033	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Calcium	11000 B		12	3.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Chromium	11 B		0.58	0.099	mg/Kg	☼	12/02/16 09:27	12/03/16 22:20	1
Cobalt	6.1		0.29	0.065	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Copper	9.6		0.58	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Iron	13000 B ^		12	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Lead	15		0.29	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Magnesium	5800		5.8	2.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Manganese	350		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Nickel	12 B		0.58	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Potassium	740		29	4.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Selenium	0.31 J		0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Sodium	420		58	7.6	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Thallium	0.94		0.58	0.28	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Vanadium	22		0.29	0.084	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Zinc	28		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.65		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:27	1
Boron	0.087 J		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:27	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B01 (0-7)D

Lab Sample ID: 500-120792-2

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 16:27	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 16:27	1
Lead	0.0080		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 16:27	1
Manganese	0.14		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 16:27	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 16:27	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.073		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 02:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:48	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.019	0.0099	mg/Kg	☼	12/02/16 14:45	12/05/16 13:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/02/16 18:33	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B02 (0-6)

Lab Sample ID: 500-120792-3

Date Collected: 11/30/16 09:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 120	12/01/16 16:55	12/06/16 18:59	1
Dibromofluoromethane	107		75 - 120	12/01/16 16:55	12/06/16 18:59	1
1,2-Dichloroethane-d4 (Surr)	96		69 - 134	12/01/16 16:55	12/06/16 18:59	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/06/16 18:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B02 (0-6)

Lab Sample ID: 500-120792-3

Date Collected: 11/30/16 09:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Phenanthrene	0.012	J	0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Fluoranthene	0.035	J	0.038	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Pyrene	0.027	J	0.038	0.0076	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Benzo[a]anthracene	0.011	J	0.038	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B02 (0-6)

Lab Sample ID: 500-120792-3

Date Collected: 11/30/16 09:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.017	J	0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Benzo[b]fluoranthene	0.029	J	0.038	0.0083	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Benzo[a]pyrene	0.016	J	0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Indeno[1,2,3-cd]pyrene	0.015	J	0.038	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		40 - 130	12/08/16 07:23	12/09/16 14:45	1
Phenol-d5	118		36 - 123	12/08/16 07:23	12/09/16 14:45	1
Nitrobenzene-d5	103		33 - 124	12/08/16 07:23	12/09/16 14:45	1
2-Fluorobiphenyl	88		42 - 115	12/08/16 07:23	12/09/16 14:45	1
2,4,6-Tribromophenol	87		25 - 130	12/08/16 07:23	12/09/16 14:45	1
Terphenyl-d14	100		25 - 150	12/08/16 07:23	12/09/16 14:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Arsenic	4.5		0.58	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Barium	91		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Beryllium	0.53		0.23	0.050	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Boron	2.0	J	2.9	0.41	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Cadmium	0.24		0.12	0.034	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Calcium	2600	B	12	3.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Chromium	11	B	0.58	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 22:24	1
Cobalt	6.6		0.29	0.066	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Copper	11		0.58	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Iron	15000	B ^	12	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Lead	7.8		0.29	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Magnesium	1800		5.8	2.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Manganese	670		0.58	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Nickel	18	B	0.58	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Potassium	840		29	4.8	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Selenium	0.47	J	0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Sodium	140		58	7.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Thallium	1.5		0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Vanadium	17		0.29	0.085	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Zinc	40		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.32	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:32	1
Boron	<0.50		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Client Sample ID: 1314V3-66-B02 (0-6)

Lab Sample ID: 500-120792-3

Date Collected: 11/30/16 09:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 16:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 16:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 16:32	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 16:32	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 16:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:51	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0098	mg/Kg	☼	12/02/16 14:45	12/05/16 11:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 18:40	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

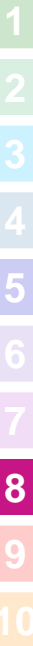
Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


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

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

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

Chain of Custody Record

Lab Job #: 500-120792
Chain of Custody Number: ES46-09
Page _____ of _____
Temperature °C of Cooler: 3.9-7.36

Client <u>EE</u>		Client Project # <u>1009008-0046-01</u>		Preservative							Preservative Key 1. HCL, Cool to 4° 2. HNO3, Cool to 4° 3. 4° 4. 1 to 4°  500-120792 COC	
Project Name <u>ITP</u>		Lab Project # <u>50012744</u>		Parameter								Comments
Project Location/State <u>Rock Island County, IL</u>		Lab PM <u>D. Wright</u>										
Sampler <u>S. Cooper</u>												
Lab ID	MS/MSD	Sample ID	Sampling Date Time		# of Containers	Matrix	VOL	SVOL	Total TAC Metals	TCUPIC99 TAC Metals	pH (4/10/11)	
1		1314V3-66-B01 (0-7)	11-30-16	0915	2	S	X	X	X	X	X	
2		1314V3-66-B01 (0-7)D	11-30-16	0915	2	S	X	X	X	X	X	64E26
3		1314V3-66-B02 (0-6)	11-30-16	0930	2	S	X	X	X	X	X	
11-30-16												

Turnaround Time Required (Business Days)

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

Sample Disposal

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

Relinquished By <u>[Signature]</u>	Company <u>BTB</u>	Date <u>11/30/16</u>	Time <u>1300</u>	Received By <u>[Signature]</u>	Company <u>TACHL</u>	Date <u>12/01/16</u>	Time <u>0925</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier _____
Shipped _____
Hand Delivered _____

Matrix Key

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120792-1

Login Number: 120792

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





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 74 (I-74) Office Phone Number, if available: _____

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

700 block of 19th Street (ISGS #1314V3-67)

City: Moline State: IL Zip Code: 61265

County: Rock Island Township: Moline

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

Latitude: 41.50586 Longitude: -90.50906

(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

Name: Illinois Department of Transportation

Street Address: 819 Depot Avenue

PO Box: _____

City: Dixon State: IL

Zip Code: 61071 Phone: 815-284-5450

Contact: Heath Jordan

Email, if available: Heath.Jordan@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 819 Depot Avenue

PO Box: _____

City: Dixon State: IL

Zip Code: 61071 Phone: 815-284-5450

Contact: Heath Jordan

Email, if available: Heath.Jordan@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 74 (I-74)Latitude: 41.50586 Longitude: -90.50906Uncontaminated 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 1314V3-67-B01, -B02, -B03, -B04, -B05, -B06, -B07, and -B08 were sampled within the construction zone adjacent to ISGS #1314V3-67 (Vacant Land). Refer to PSI Report for ISGS #1314V3-67 (Vacant Land) including Table 4-4, and Figure 4-1.

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

See attached data summary table and associated laboratory data package J120792-2.

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

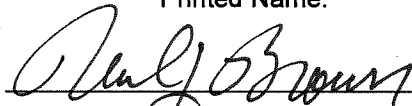
I, Neil J. Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental 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 StreetCity: Chicago State: IL Zip Code: 60603Phone: 312-578-9243

Neil J. Brown

Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

3/15/17

Date:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01

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.

J = Estimated value.

U = Analyte was analyzed for but not detected.

Criteria Qualifiers and Shading

† = Concentration exceeds the most stringent MAC.

m = Concentration exceeds the MAC for an MSA.

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

 = Concentration exceeds applicable comparison criteria.

**PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-67 (Vacant Land)				Comparison Criteria					
	1314V3-67-B05	1314V3-67-B06	1314V3-67-B07	1314V3-67-B08	MACs			TACO		
BORING	1314V3-67-B05 (0-6)	1314V3-67-B06 (0-4)	1314V3-67-B07 (0-4)	1314V3-67-B08 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-67-B05 (0-6)	1314V3-67-B06 (0-4)	1314V3-67-B07 (0-4)	1314V3-67-B08 (0-4)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	0-4	0-4	0-4						
pH	9	8.7	8.3	8.2						
VOCs (None Detected)										
SVOCs (mg/kg)										
Anthracene	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.012 J	0.016 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.014 J	0.02 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.022 J	0.029 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Chrysene	0.013 J	0.014 J	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.0077 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.026 J	0.022 J	ND U	ND U	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.012 J	0.013 J	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.019 J	0.013 J	ND U	ND U	--	--	--	--	--	--
Pyrene	0.023 J	0.02 J	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.26 J	0.23 J	ND U	0.27 J	5	--	--	31	82	--
Arsenic	4.4	2.6	2.3	6.6	11.3	13	--	13	61	--
Barium	47	70	74	76	1,500	--	--	5,500	14,000	--
Beryllium	0.48	0.48	0.47	0.53	22	--	--	160	410	--
Boron	4.2	3.2	1.8 J	1.7 J	40	--	--	16,000	41,000	--
Cadmium	0.28	0.21	0.23	0.18	5.2	--	--	78	200	--
Calcium	42,000	6,400	4,000	2,700	--	--	--	--	--	--
Chromium	11	10	9.6	12	21	--	--	230	690	--
Cobalt	5.3	4.6	4.4	5.5	20	--	--	4,700	12,000	--
Copper	12	9.9	9.4	10	2,900	--	--	2,900	8,200	--
Iron	13,000	13,000	11,000	15,000	15,000	15,900	--	--	--	--
Lead	11	11	7.1	7.2	107	--	--	400	700	--
Magnesium	17,000	3,200	2,200	2,000	325,000	--	--	--	730,000	--
Manganese	290	330	310	480	630	636	--	1,600	4,100	--
Mercury	0.046	0.032	0.019	0.024	0.89	--	--	10	0.1	--
Nickel	19	11	11	14	100	--	--	1,600	4,100	--
Potassium	1,300	770	600	680	--	--	--	--	--	--
Selenium	0.33 J	0.45 J	0.35 J	0.5 J	1.3	--	--	390	1,000	--
Sodium	860	740	180	170	--	--	--	--	--	--
Thallium	0.95	0.96	0.79	1.3	2.6	--	--	6.3	160	--
Vanadium	18	15	13	24	550	--	--	550	1,400	--
Zinc	31	36	33	30	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.53	0.66	0.32 J	0.32 J	--	--	--	--	--	2
Boron	0.063 J	0.089 J	0.093 J	0.057 J	--	--	--	--	--	2
Cadmium	0.0024 J	ND U	ND U	ND U	--	--	--	--	--	0.005
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.6 L	0.33 L	0.024 J	ND U	--	--	--	--	--	0.15
Nickel	0.028	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	1 L	0.48 J L	NA	NA	--	--	--	--	--	0.15

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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: 500-120792-2
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

Jodie Bracken

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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



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Sample Summary	12
Client Sample Results	13
Definitions	53
Certification Summary	54
Chain of Custody	55
Receipt Checklists	56

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Job ID: 500-120792-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-120792-2

Comments

No additional comments.

Receipt

The samples were received on 12/1/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 364109 had 1 analyte outside control limits: Hexachlorocyclopentadiene. These results have been reported and qualified. (LCS 500-364109/2-A)

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

Metals

Method(s) 6010B: The instrument blank for analytical batch 500-363473 at line 100 contained Iron greater than the reporting limit (RL); associated samples were not reanalyzed because they contained Iron greater than 10 times the amount found in the instrument blank. The data have been qualified and reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (0-7)

Lab Sample ID: 500-120792-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0073	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.014	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.012	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.6		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J	0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	6500	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.1		0.28	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	9.1		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	8.0		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4400		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	190		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.0	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	850		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	84		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.91		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.84		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.41		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.022	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B04 (7-13)

Lab Sample ID: 500-120792-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.033	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0069	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.082		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.075		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.043		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.045		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.12	J	0.19	0.070	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.068		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.025	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.052		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.032	J	0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.27	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.8		0.59	0.27	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (7-13) (Continued)

Lab Sample ID: 500-120792-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	73		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.23	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	4.1		2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	8600	B	12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B ^	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	50		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4700		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	940		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.32	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	150		59	7.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	69		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.18	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.024		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.42	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.089		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.047		0.019	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B05 (0-6)

Lab Sample ID: 500-120792-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.019	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.026	J	0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.035	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.012	J	0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.022	J	0.035	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.014	J	0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.035	0.0092	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.4		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	4.2		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	42000	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.53	0.091	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B05 (0-6) (Continued)

Lab Sample ID: 500-120792-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	5.3		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19	B	0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		27	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	860		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.95		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.27	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.046		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	9.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B03 (0-4)

Lab Sample ID: 500-120792-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0059	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0099	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0099	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0064	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.012	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.33	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.1		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.4		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	7.9		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15	B	0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	860		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	600		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.91		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.1	0.36	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B03 (0-4) (Continued)

Lab Sample ID: 500-120792-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.91		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.52		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.67		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B02 (0-6)

Lab Sample ID: 500-120792-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.29	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.9		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	120		0.50	0.091	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	8800	B	10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.50	0.086	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	8.5		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	6.3		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5400		5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	960		0.50	0.099	mg/Kg	1	☼	6010B	Total/NA
Nickel	17	B	0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	820		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	51		50	6.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.6		0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.25	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	27		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.72		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.076	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.015	J	0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B01 (0-5)

Lab Sample ID: 500-120792-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.035	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.047		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.045		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.023	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.023	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.034	J	0.037	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.026	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.037	0.0095	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (0-5) (Continued)

Lab Sample ID: 500-120792-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.28	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.6		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.54	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	3.4		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	22000	B	11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.8	B	0.54	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	9.0		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	32		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Sodium	97		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.54	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.88		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0028	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Iron	0.44		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.0091		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.81		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.20	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.074		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.017	0.0087	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B01 (5-9)

Lab Sample ID: 500-120792-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.011	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.021	J	0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.010	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.022	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.011	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.4		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	86		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7		2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	9200	B	12	3.7	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (5-9) (Continued)

Lab Sample ID: 500-120792-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	10	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.3		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	50		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5600		5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	830		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.87		0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.88		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0034	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.033		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.28	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.25		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.32		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.045		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B08 (0-4)

Lab Sample ID: 500-120792-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.27	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.6		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	76		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	2700	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	7.2		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2000		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	480		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	680		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.50	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.35	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B08 (0-4) (Continued)

Lab Sample ID: 500-120792-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.057	J	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.024		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B07 (0-4)

Lab Sample ID: 500-120792-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	74		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	4000	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.6	B	0.53	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.4		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	9.4		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.1		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2200		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B	0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	600		27	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.79		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	33		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.093	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.019		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-67-B06 (0-4)

Lab Sample ID: 500-120792-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.013	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.022	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.020	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.016	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.014	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.029	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.020	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.013	J	0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0077	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.6		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.53	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.21	0.046	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B06 (0-4) (Continued)

Lab Sample ID: 500-120792-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.2		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	6400	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.53	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.6		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	9.9		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3200		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B	0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	740		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.96		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.33		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.48	F1	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.032		0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120792-4	1314V3-67-B04 (0-7)	Solid	11/30/16 14:25	12/01/16 09:25
500-120792-5	1314V3-67-B04 (7-13)	Solid	11/30/16 14:30	12/01/16 09:25
500-120792-6	1314V3-67-B05 (0-6)	Solid	11/30/16 14:50	12/01/16 09:25
500-120792-7	1314V3-67-B03 (0-4)	Solid	11/30/16 15:25	12/01/16 09:25
500-120792-8	1314V3-67-B02 (0-6)	Solid	11/30/16 15:40	12/01/16 09:25
500-120792-9	1314V3-67-B01 (0-5)	Solid	11/30/16 16:00	12/01/16 09:25
500-120792-10	1314V3-67-B01 (5-9)	Solid	11/30/16 16:05	12/01/16 09:25
500-120792-11	1314V3-67-B08 (0-4)	Solid	11/30/16 16:20	12/01/16 09:25
500-120792-12	1314V3-67-B07 (0-4)	Solid	11/30/16 16:30	12/01/16 09:25
500-120792-13	1314V3-67-B06 (0-4)	Solid	11/30/16 16:45	12/01/16 09:25



Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (0-7)

Lab Sample ID: 500-120792-4

Date Collected: 11/30/16 14:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 120	12/01/16 16:55	12/06/16 19:25	1
Dibromofluoromethane	111		75 - 120	12/01/16 16:55	12/06/16 19:25	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/06/16 19:25	1
Toluene-d8 (Surr)	107		75 - 123	12/01/16 16:55	12/06/16 19:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (0-7)

Lab Sample ID: 500-120792-4

Date Collected: 11/30/16 14:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachlorocyclopentadiene	<0.75	*	0.75	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Phenanthrene	0.0073	J	0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Fluoranthene	0.014	J	0.037	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Pyrene	0.012	J	0.037	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (0-7)

Lab Sample ID: 500-120792-4

Date Collected: 11/30/16 14:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/08/16 07:23	12/09/16 15:11	1
Phenol-d5	96		36 - 123	12/08/16 07:23	12/09/16 15:11	1
Nitrobenzene-d5	83		33 - 124	12/08/16 07:23	12/09/16 15:11	1
2-Fluorobiphenyl	73		42 - 115	12/08/16 07:23	12/09/16 15:11	1
2,4,6-Tribromophenol	56		25 - 130	12/08/16 07:23	12/09/16 15:11	1
Terphenyl-d14	80		25 - 150	12/08/16 07:23	12/09/16 15:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.23	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Arsenic	3.6		0.55	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Barium	61		0.55	0.10	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Beryllium	0.45		0.22	0.048	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Boron	2.5	J	2.8	0.39	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Cadmium	0.10	J	0.11	0.032	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Calcium	6500	B	11	3.6	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Chromium	10	B	0.55	0.095	mg/Kg	☼	12/02/16 09:27	12/03/16 22:29	1
Cobalt	4.1		0.28	0.062	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Copper	9.1		0.55	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Iron	13000	B ^	11	4.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Lead	8.0		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Magnesium	4400		5.5	2.2	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Manganese	190		0.55	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Nickel	9.0	B	0.55	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Potassium	850		28	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Selenium	0.37	J	0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Sodium	84		55	7.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Thallium	0.91		0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Vanadium	15		0.28	0.081	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Zinc	30		1.1	0.35	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.84		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:37	1
Boron	0.11	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:37	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (0-7)

Lab Sample ID: 500-120792-4

Date Collected: 11/30/16 14:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Manganese	0.41		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Zinc	0.022	J B	0.50	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.20		0.025	0.010	mg/L	-	12/05/16 08:18	12/06/16 02:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 08:13	12/06/16 15:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 08:13	12/06/16 15:54	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.019	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		12/02/16 18:47	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (7-13)

Lab Sample ID: 500-120792-5

Date Collected: 11/30/16 14:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Carbon disulfide	<0.0045		0.0045	0.00095	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/01/16 16:55	12/07/16 05:02	1
Dibromofluoromethane	108		75 - 120	12/01/16 16:55	12/07/16 05:02	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/07/16 05:02	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/07/16 05:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (7-13)

Lab Sample ID: 500-120792-5

Date Collected: 11/30/16 14:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.1

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	☼	12/08/16 07:23	12/09/16 15:36	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachlorocyclopentadiene	<0.77	*	0.77	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Phenanthrene	0.033	J	0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Anthracene	0.0069	J	0.038	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Fluoranthene	0.082		0.038	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Pyrene	0.075		0.038	0.0076	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Benzo[a]anthracene	0.043		0.038	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (7-13)

Lab Sample ID: 500-120792-5

Date Collected: 11/30/16 14:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.045		0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Bis(2-ethylhexyl) phthalate	0.12 J		0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Benzo[b]fluoranthene	0.068		0.038	0.0083	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Benzo[k]fluoranthene	0.025 J		0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Benzo[a]pyrene	0.052		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Indeno[1,2,3-cd]pyrene	0.032 J		0.038	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Benzo[g,h,i]perylene	0.022 J		0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		40 - 130	12/08/16 07:23	12/09/16 15:36	1
Phenol-d5	117		36 - 123	12/08/16 07:23	12/09/16 15:36	1
Nitrobenzene-d5	98		33 - 124	12/08/16 07:23	12/09/16 15:36	1
2-Fluorobiphenyl	85		42 - 115	12/08/16 07:23	12/09/16 15:36	1
2,4,6-Tribromophenol	63		25 - 130	12/08/16 07:23	12/09/16 15:36	1
Terphenyl-d14	94		25 - 150	12/08/16 07:23	12/09/16 15:36	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27 J		1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Arsenic	3.8		0.59	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Barium	73		0.59	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Beryllium	0.50		0.23	0.051	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Boron	4.1		2.9	0.41	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Cadmium	0.30		0.12	0.034	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Calcium	8600 B		12	3.8	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Chromium	11 B		0.59	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 22:33	1
Cobalt	5.2		0.29	0.066	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Copper	12		0.59	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Iron	12000 B ^		12	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Lead	50		0.29	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Magnesium	4700		5.9	2.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Manganese	310		0.59	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Nickel	12 B		0.59	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Potassium	940		29	4.8	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Selenium	0.32 J		0.59	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Silver	<0.29		0.29	0.069	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Sodium	150		59	7.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Thallium	1.0		0.59	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Vanadium	16		0.29	0.086	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Zinc	69		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.76		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:42	1
Boron	0.18 J		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:42	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B04 (7-13)

Lab Sample ID: 500-120792-5

Date Collected: 11/30/16 14:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0040	J	0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 16:42	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:42	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:42	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 16:42	1
Lead	0.024		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 16:42	1
Manganese	2.3		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:42	1
Nickel	0.018	J	0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:42	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 16:42	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:42	1
Zinc	0.42	J B	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 16:42	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.089		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 02:23	1
Manganese	0.17		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 02:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:58	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.019	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/02/16 18:54	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B05 (0-6)

Lab Sample ID: 500-120792-6

Date Collected: 11/30/16 14:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/01/16 16:55	12/07/16 05:28	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 05:28	1
1,2-Dichloroethane-d4 (Surr)	113		69 - 134	12/01/16 16:55	12/07/16 05:28	1
Toluene-d8 (Surr)	106		75 - 123	12/01/16 16:55	12/07/16 05:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B05 (0-6)

Lab Sample ID: 500-120792-6

Date Collected: 11/30/16 14:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachlorocyclopentadiene	<0.72 *		0.72	0.20	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Phenanthrene	0.019	J	0.035	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Fluoranthene	0.026	J	0.035	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Pyrene	0.023	J	0.035	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Benzo[a]anthracene	0.012	J	0.035	0.0048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B05 (0-6)

Lab Sample ID: 500-120792-6

Date Collected: 11/30/16 14:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.013	J	0.035	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Benzo[b]fluoranthene	0.022	J	0.035	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Benzo[k]fluoranthene	<0.035		0.035	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Benzo[a]pyrene	0.014	J	0.035	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Indeno[1,2,3-cd]pyrene	0.012	J	0.035	0.0092	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/08/16 07:23	12/09/16 16:02	1
Phenol-d5	114		36 - 123	12/08/16 07:23	12/09/16 16:02	1
Nitrobenzene-d5	98		33 - 124	12/08/16 07:23	12/09/16 16:02	1
2-Fluorobiphenyl	83		42 - 115	12/08/16 07:23	12/09/16 16:02	1
2,4,6-Tribromophenol	54		25 - 130	12/08/16 07:23	12/09/16 16:02	1
Terphenyl-d14	94		25 - 150	12/08/16 07:23	12/09/16 16:02	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Arsenic	4.4		0.53	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Barium	47		0.53	0.097	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Beryllium	0.48		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Boron	4.2		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Cadmium	0.28		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Calcium	42000	B	11	3.4	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Chromium	11	B	0.53	0.091	mg/Kg	☼	12/02/16 09:27	12/03/16 22:37	1
Cobalt	5.3		0.27	0.060	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Copper	12		0.53	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Iron	13000	B ^	11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Lead	11		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Magnesium	17000		5.3	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Manganese	290		0.53	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Nickel	19	B	0.53	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Potassium	1300		27	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Selenium	0.33	J	0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Sodium	860		53	7.0	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Thallium	0.95		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Vanadium	18		0.27	0.077	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Zinc	31		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.53		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:47	1
Boron	0.063	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:47	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B05 (0-6)

Lab Sample ID: 500-120792-6

Date Collected: 11/30/16 14:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0024	J	0.0050	0.0020	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Manganese	1.6		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Nickel	0.028		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.0		0.025	0.010	mg/L	-	12/05/16 08:18	12/06/16 02:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 08:13	12/06/16 16:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 08:13	12/06/16 16:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.019	0.0099	mg/Kg	☼	12/02/16 14:45	12/05/16 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.0		0.2	0.2	SU	-		12/02/16 19:01	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B03 (0-4)

Lab Sample ID: 500-120792-7

Date Collected: 11/30/16 15:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/01/16 16:55	12/07/16 05:53	1
Dibromofluoromethane	107		75 - 120	12/01/16 16:55	12/07/16 05:53	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/07/16 05:53	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/07/16 05:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B03 (0-4)

Lab Sample ID: 500-120792-7

Date Collected: 11/30/16 15:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Phenanthrene	0.0059	J	0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Fluoranthene	0.0099	J	0.037	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Pyrene	0.0099	J	0.037	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[a]anthracene	0.0064	J	0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B03 (0-4)

Lab Sample ID: 500-120792-7

Date Collected: 11/30/16 15:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[b]fluoranthene	0.012	J	0.037	0.0081	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/08/16 07:23	12/09/16 16:28	1
Phenol-d5	111		36 - 123	12/08/16 07:23	12/09/16 16:28	1
Nitrobenzene-d5	98		33 - 124	12/08/16 07:23	12/09/16 16:28	1
2-Fluorobiphenyl	85		42 - 115	12/08/16 07:23	12/09/16 16:28	1
2,4,6-Tribromophenol	44		25 - 130	12/08/16 07:23	12/09/16 16:28	1
Terphenyl-d14	94		25 - 150	12/08/16 07:23	12/09/16 16:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J	1.1	0.23	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Arsenic	4.1		0.56	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Barium	56		0.56	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Beryllium	0.53		0.22	0.049	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Boron	2.7	J	2.8	0.39	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Cadmium	0.17		0.11	0.032	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Calcium	29000	B	11	3.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Chromium	11	B	0.56	0.096	mg/Kg	☼	12/02/16 09:27	12/03/16 22:42	1
Cobalt	6.4		0.28	0.063	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Copper	11		0.56	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Iron	14000	B	11	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Lead	7.9		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Magnesium	13000		5.6	2.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Manganese	290		0.56	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Nickel	15	B	0.56	0.15	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Potassium	860		28	4.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Sodium	600		56	7.4	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Thallium	0.91		0.56	0.28	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Vanadium	19		0.28	0.082	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Zinc	28		1.1	0.36	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.91		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:03	1
Boron	0.053	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:03	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B03 (0-4)

Lab Sample ID: 500-120792-7

Date Collected: 11/30/16 15:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:03	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:03	1
Manganese	0.52		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:03	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.67		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 02:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:05	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.018	0.0093	mg/Kg	☼	12/02/16 14:45	12/05/16 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			12/02/16 19:08	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B02 (0-6)

Lab Sample ID: 500-120792-8

Date Collected: 11/30/16 15:40

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/01/16 16:55	12/07/16 06:18	1
Dibromofluoromethane	106		75 - 120	12/01/16 16:55	12/07/16 06:18	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/07/16 06:18	1
Toluene-d8 (Surr)	104		75 - 123	12/01/16 16:55	12/07/16 06:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B02 (0-6)

Lab Sample ID: 500-120792-8

Date Collected: 11/30/16 15:40

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachlorocyclopentadiene	<0.74 *		0.74	0.21	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B02 (0-6)

Lab Sample ID: 500-120792-8

Date Collected: 11/30/16 15:40

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		40 - 130	12/08/16 07:23	12/09/16 16:53	1
Phenol-d5	86		36 - 123	12/08/16 07:23	12/09/16 16:53	1
Nitrobenzene-d5	74		33 - 124	12/08/16 07:23	12/09/16 16:53	1
2-Fluorobiphenyl	65		42 - 115	12/08/16 07:23	12/09/16 16:53	1
2,4,6-Tribromophenol	35		25 - 130	12/08/16 07:23	12/09/16 16:53	1
Terphenyl-d14	76		25 - 150	12/08/16 07:23	12/09/16 16:53	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.0	0.21	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Arsenic	2.9		0.50	0.23	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Barium	120		0.50	0.091	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Beryllium	0.41		0.20	0.043	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Boron	2.3	J	2.5	0.35	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Cadmium	0.26		0.10	0.029	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Calcium	8800	B	10	3.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Chromium	11	B	0.50	0.086	mg/Kg	☼	12/02/16 09:27	12/03/16 22:47	1
Cobalt	7.0		0.25	0.056	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Copper	8.5		0.50	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Iron	11000	B	10	3.9	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Lead	6.3		0.25	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Magnesium	5400		5.0	2.0	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Manganese	960		0.50	0.099	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Nickel	17	B	0.50	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Potassium	820		25	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Selenium	0.30	J	0.50	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Silver	<0.25		0.25	0.058	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Sodium	51		50	6.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Thallium	1.6		0.50	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Vanadium	15		0.25	0.073	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Zinc	27		1.0	0.32	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.72		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:08	1
Boron	0.076	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:08	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B02 (0-6)

Lab Sample ID: 500-120792-8

Date Collected: 11/30/16 15:40

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:08	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:08	1
Manganese	0.11		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:08	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:08	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.018	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 11:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 19:16	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (0-5)

Lab Sample ID: 500-120792-9

Date Collected: 11/30/16 16:00

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/01/16 16:55	12/07/16 14:32	1
Dibromofluoromethane	109		75 - 120	12/01/16 16:55	12/07/16 14:32	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/07/16 14:32	1
Toluene-d8 (Surr)	107		75 - 123	12/01/16 16:55	12/07/16 14:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
1,3-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (0-5)

Lab Sample ID: 500-120792-9

Date Collected: 11/30/16 16:00

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachlorocyclopentadiene	<0.74	*	0.74	0.21	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
N-Nitrosodiphenylamine	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Phenanthrene	0.035	J	0.037	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Fluoranthene	0.047		0.037	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Pyrene	0.045		0.037	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Benzo[a]anthracene	0.023	J	0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (0-5)

Lab Sample ID: 500-120792-9

Date Collected: 11/30/16 16:00

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.023	J	0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Benzo[b]fluoranthene	0.034	J	0.037	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Benzo[k]fluoranthene	0.015	J	0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Benzo[a]pyrene	0.026	J	0.037	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Indeno[1,2,3-cd]pyrene	0.015	J	0.037	0.0095	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/08/16 07:23	12/09/16 17:19	1
Phenol-d5	106		36 - 123	12/08/16 07:23	12/09/16 17:19	1
Nitrobenzene-d5	94		33 - 124	12/08/16 07:23	12/09/16 17:19	1
2-Fluorobiphenyl	81		42 - 115	12/08/16 07:23	12/09/16 17:19	1
2,4,6-Tribromophenol	52		25 - 130	12/08/16 07:23	12/09/16 17:19	1
Terphenyl-d14	90		25 - 150	12/08/16 07:23	12/09/16 17:19	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Arsenic	3.6		0.54	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Barium	64		0.54	0.098	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Beryllium	0.41		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Boron	3.4		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Cadmium	0.24		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Calcium	22000	B	11	3.5	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Chromium	8.8	B	0.54	0.092	mg/Kg	☼	12/02/16 09:27	12/03/16 22:58	1
Cobalt	5.1		0.27	0.061	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Copper	9.0		0.54	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Iron	11000	B	11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Lead	32		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Magnesium	13000		5.4	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Manganese	460		0.54	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Nickel	12	B	0.54	0.15	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Potassium	750		27	4.4	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Selenium	<0.54		0.54	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Sodium	97		54	7.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Thallium	1.1		0.54	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Vanadium	16		0.27	0.078	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Zinc	39		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.88		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:12	1
Boron	0.063	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:12	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (0-5)

Lab Sample ID: 500-120792-9

Date Collected: 11/30/16 16:00

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0028	J	0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:12	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Iron	0.44		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:12	1
Lead	0.0091		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:12	1
Manganese	0.81		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:12	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Zinc	0.20	J B	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:12	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.074		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 03:06	1
Manganese	0.24		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 03:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.017	0.0087	mg/Kg	☼	12/02/16 14:45	12/05/16 11:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/02/16 19:23	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (5-9)

Lab Sample ID: 500-120792-10

Date Collected: 11/30/16 16:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/01/16 16:55	12/07/16 07:09	1
Dibromofluoromethane	108		75 - 120	12/01/16 16:55	12/07/16 07:09	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/07/16 07:09	1
Toluene-d8 (Surr)	106		75 - 123	12/01/16 16:55	12/07/16 07:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (5-9)

Lab Sample ID: 500-120792-10

Date Collected: 11/30/16 16:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachlorocyclopentadiene	<0.78	*	0.78	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Methylnaphthalene	<0.078		0.078	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dinitrophenol	<0.78		0.78	0.69	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Phenanthrene	0.011	J	0.039	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Fluoranthene	0.021	J	0.039	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Pyrene	0.019	J	0.039	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Benzo[a]anthracene	0.010	J	0.039	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (5-9)

Lab Sample ID: 500-120792-10

Date Collected: 11/30/16 16:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.013	J	0.039	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Benzo[b]fluoranthene	0.022	J	0.039	0.0084	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Benzo[a]pyrene	0.013	J	0.039	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Indeno[1,2,3-cd]pyrene	0.011	J	0.039	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/08/16 07:23	12/09/16 17:44	1
Phenol-d5	106		36 - 123	12/08/16 07:23	12/09/16 17:44	1
Nitrobenzene-d5	93		33 - 124	12/08/16 07:23	12/09/16 17:44	1
2-Fluorobiphenyl	81		42 - 115	12/08/16 07:23	12/09/16 17:44	1
2,4,6-Tribromophenol	47		25 - 130	12/08/16 07:23	12/09/16 17:44	1
Terphenyl-d14	89		25 - 150	12/08/16 07:23	12/09/16 17:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.25	J	1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Arsenic	3.4		0.58	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Barium	86		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Beryllium	0.48		0.23	0.050	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Boron	3.7		2.9	0.40	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Cadmium	0.21		0.12	0.033	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Calcium	9200	B	12	3.7	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Chromium	10	B	0.58	0.099	mg/Kg	☼	12/02/16 09:27	12/03/16 23:02	1
Cobalt	4.3		0.29	0.065	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Copper	13		0.58	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Iron	11000	B	12	4.5	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Lead	50		0.29	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Magnesium	5600		5.8	2.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Manganese	230		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Nickel	11	B	0.58	0.16	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Potassium	830		29	4.7	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Selenium	0.37	J	0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Sodium	180		58	7.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Thallium	0.87		0.58	0.28	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Vanadium	16		0.29	0.084	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Zinc	60		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.88		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:17	1
Boron	0.095	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:17	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B01 (5-9)

Lab Sample ID: 500-120792-10

Date Collected: 11/30/16 16:05

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0034	J	0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:17	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:17	1
Lead	0.033		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:17	1
Manganese	1.1		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Nickel	0.019	J	0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:17	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Zinc	0.28	J B	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:17	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.25		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 03:13	1
Manganese	0.32		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 03:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:22	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.020	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 19:30	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B08 (0-4)

Lab Sample ID: 500-120792-11

Date Collected: 11/30/16 16:20

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/01/16 16:55	12/07/16 13:16	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 13:16	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/01/16 16:55	12/07/16 13:16	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/07/16 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B08 (0-4)

Lab Sample ID: 500-120792-11

Date Collected: 11/30/16 16:20

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B08 (0-4)

Lab Sample ID: 500-120792-11

Date Collected: 11/30/16 16:20

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/08/16 07:23	12/09/16 18:10	1
Phenol-d5	114		36 - 123	12/08/16 07:23	12/09/16 18:10	1
Nitrobenzene-d5	100		33 - 124	12/08/16 07:23	12/09/16 18:10	1
2-Fluorobiphenyl	86		42 - 115	12/08/16 07:23	12/09/16 18:10	1
2,4,6-Tribromophenol	58		25 - 130	12/08/16 07:23	12/09/16 18:10	1
Terphenyl-d14	96		25 - 150	12/08/16 07:23	12/09/16 18:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	1.1	0.23	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Arsenic	6.6		0.55	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Barium	76		0.55	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Beryllium	0.53		0.22	0.048	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Boron	1.7	J	2.8	0.39	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Cadmium	0.18		0.11	0.032	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Calcium	2700	B	11	3.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Chromium	12	B	0.55	0.095	mg/Kg	☼	12/02/16 09:27	12/03/16 23:06	1
Cobalt	5.5		0.28	0.063	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Copper	10		0.55	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Iron	15000	B	11	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Lead	7.2		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Magnesium	2000		5.5	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Manganese	480		0.55	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Nickel	14	B	0.55	0.15	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Potassium	680		28	4.5	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Selenium	0.50	J	0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Sodium	170		55	7.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Thallium	1.3		0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Vanadium	24		0.28	0.081	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Zinc	30		1.1	0.35	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.32	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:22	1
Boron	0.057	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:22	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B08 (0-4)

Lab Sample ID: 500-120792-11

Date Collected: 11/30/16 16:20

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:22	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:22	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:22	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:22	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:22	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:22	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:22	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:22	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:25	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0096	mg/Kg	✱	12/02/16 14:45	12/05/16 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 19:44	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B07 (0-4)

Lab Sample ID: 500-120792-12

Date Collected: 11/30/16 16:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/01/16 16:55	12/07/16 13:41	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 13:41	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/01/16 16:55	12/07/16 13:41	1
Toluene-d8 (Surr)	106		75 - 123	12/01/16 16:55	12/07/16 13:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B07 (0-4)

Lab Sample ID: 500-120792-12

Date Collected: 11/30/16 16:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachlorocyclopentadiene	<0.75 *		0.75	0.21	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B07 (0-4)

Lab Sample ID: 500-120792-12

Date Collected: 11/30/16 16:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		40 - 130	12/08/16 07:23	12/09/16 18:35	1
Phenol-d5	84		36 - 123	12/08/16 07:23	12/09/16 18:35	1
Nitrobenzene-d5	76		33 - 124	12/08/16 07:23	12/09/16 18:35	1
2-Fluorobiphenyl	66		42 - 115	12/08/16 07:23	12/09/16 18:35	1
2,4,6-Tribromophenol	39		25 - 130	12/08/16 07:23	12/09/16 18:35	1
Terphenyl-d14	75		25 - 150	12/08/16 07:23	12/09/16 18:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Arsenic	2.3		0.53	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Barium	74		0.53	0.097	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Beryllium	0.47		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Boron	1.8 J		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Cadmium	0.23		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Calcium	4000 B		11	3.4	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Chromium	9.6 B		0.53	0.092	mg/Kg	☼	12/02/16 09:27	12/03/16 23:10	1
Cobalt	4.4		0.27	0.060	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Copper	9.4		0.53	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Iron	11000 B		11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Lead	7.1		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Magnesium	2200		5.3	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Manganese	310		0.53	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Nickel	11 B		0.53	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Potassium	600		27	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Selenium	0.35 J		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Sodium	180		53	7.0	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Thallium	0.79		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Vanadium	13		0.27	0.078	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Zinc	33		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.32 J		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:27	1
Boron	0.093 J		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:27	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B07 (0-4)

Lab Sample ID: 500-120792-12

Date Collected: 11/30/16 16:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:27	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:27	1
Manganese	0.024	J	0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:27	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/02/16 19:51	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B06 (0-4)

Lab Sample ID: 500-120792-13

Date Collected: 11/30/16 16:45

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Vinyl acetate	<0.0042		0.0042	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/01/16 16:55	12/07/16 14:06	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 14:06	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/01/16 16:55	12/07/16 14:06	1
Toluene-d8 (Surr)	104		75 - 123	12/01/16 16:55	12/07/16 14:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B06 (0-4)

Lab Sample ID: 500-120792-13

Date Collected: 11/30/16 16:45

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Phenanthrene	0.013	J	0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Fluoranthene	0.022	J	0.038	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Pyrene	0.020	J	0.038	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Benzo[a]anthracene	0.016	J	0.038	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B06 (0-4)

Lab Sample ID: 500-120792-13

Date Collected: 11/30/16 16:45

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.014	J	0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Benzo[b]fluoranthene	0.029	J	0.038	0.0082	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Benzo[a]pyrene	0.020	J	0.038	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Indeno[1,2,3-cd]pyrene	0.013	J	0.038	0.0098	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Dibenz(a,h)anthracene	0.0077	J	0.038	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		40 - 130	12/08/16 07:23	12/09/16 19:01	1
Phenol-d5	109		36 - 123	12/08/16 07:23	12/09/16 19:01	1
Nitrobenzene-d5	95		33 - 124	12/08/16 07:23	12/09/16 19:01	1
2-Fluorobiphenyl	82		42 - 115	12/08/16 07:23	12/09/16 19:01	1
2,4,6-Tribromophenol	51		25 - 130	12/08/16 07:23	12/09/16 19:01	1
Terphenyl-d14	94		25 - 150	12/08/16 07:23	12/09/16 19:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Arsenic	2.6		0.53	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Barium	70		0.53	0.098	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Beryllium	0.48		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Boron	3.2		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Cadmium	0.21		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Calcium	6400	B	11	3.4	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Chromium	10	B	0.53	0.092	mg/Kg	☼	12/02/16 09:27	12/03/16 23:15	1
Cobalt	4.6		0.27	0.060	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Copper	9.9		0.53	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Iron	13000	B	11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Lead	11		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Magnesium	3200		5.3	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Manganese	330		0.53	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Nickel	11	B	0.53	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Potassium	770		27	4.4	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Selenium	0.45	J	0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Sodium	740		53	7.0	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Thallium	0.96		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Vanadium	15		0.27	0.078	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Zinc	36		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:32	1
Boron	0.089	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Client Sample ID: 1314V3-67-B06 (0-4)

Lab Sample ID: 500-120792-13

Date Collected: 11/30/16 16:45

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:32	1
Manganese	0.33		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:32	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Zinc	0.024	J B	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.48	F1	0.025	0.010	mg/L		12/05/16 08:18	12/06/16 03:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.019	0.0098	mg/Kg	☼	12/02/16 14:45	12/05/16 11:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU			12/02/16 19:58	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-2

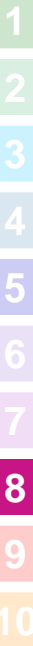
Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

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

Chain of Custody Record

Lab Job #: 500-126792

Chain of Custody Number: E846-10

Page _____ of _____

Temperature °C of Cooler: 39-736

Client		Client Project #		Preservative							Preservative Key								
EE		1009008.0046-01									1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other								
Project Name		Lab Project #		Parameter							Comments								
F74		50012744																	
Project Location/State		Lab PM																	
Rock Island County, IL		D. Wright																	
Samples																			
S. Cooper																			
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Vac	Suvc	Total Plead meth	TCOP/PPUP	TAC meth	pH/Residual							
			Date	Time															
4		1314V3-67-1304 (0-7)	11-30-16	1425	2	S	X	X	X	X	X	X							
5		1314V3-67-1304 (7-13)	11-30-16	1430	2	S	X	X	X	X	X	X							
6		1314V3-67-1305 (0-6)	11-30-16	1450	2	S	X	X	X	X	X	X							
7		1314V3-67-1303 (0-4)	11-30-16	1525	2	S	X	X	X	X	X	X							
8		1314V3-67-1302 (0-6)	11-30-16	1540	2	S	X	X	X	X	X	X							
9		1314V3-67-1301 (0-5)	11-30-16	1600	2	S	X	X	X	X	X	X							
10		1314V3-67-1301 (5-9)	11-30-16	1605	2	S	X	X	X	X	X	X							
11		1314V3-67-1308 (0-4)	11-30-16	1620	2	S	X	X	X	X	X	X							
12		1314V3-67-1307 (0-4)	11-30-16	1630	2	S	X	X	X	X	X	X							
13		1314V3-67-1306 (0-4)	11-30-16	1645	2	S	X	X	X	X	X	X							

Turnaround Time Required (Business Days)

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

Sample Disposal

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EE	11-30-16	1730	Deil Samuyl	TACH	12/01/16	0925
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier

Shipped

Hand Delivered

Matrix Key

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120792-2

Login Number: 120792

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





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 74 (I-74) Office Phone Number, if available: _____

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

1904 11th Avenue A (ISGS #1314V3-74)

City: Moline State: IL Zip Code: 61265

County: Rock Island Township: Moline

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

Latitude: 41.50213 Longitude: -90.50697

(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: 1610453002 BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner
Name: Illinois Department of Transportation
Street Address: 819 Depot Avenue
PO Box: _____
City: Dixon State: IL
Zip Code: 61071 Phone: 815-284-5450
Contact: Heath Jordan
Email, if available: Heath.Jordan@illinois.gov

Site Operator
Name: Illinois Department of Transportation
Street Address: 819 Depot Avenue
PO Box: _____
City: Dixon State: IL
Zip Code: 61071 Phone: 815-284-5450
Contact: Heath Jordan
Email, if available: Heath.Jordan@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 74 (I-74)Latitude: 41.50213 Longitude: -90.50697Uncontaminated 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):

Location 1314V3-74-B01 was sampled within the construction zone adjacent to ISGS #1314V3-74 (Residence). Refer to PSI Report for ISGS #1314V3-74 (Residence) including Table 4-4, and Figure 4-6.

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

See attached data summary table and associated laboratory data package J120748-1.

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

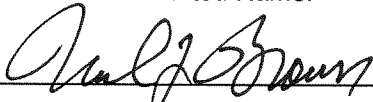
I, Neil J. Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental 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 StreetCity: Chicago State: IL Zip Code: 60603Phone: 312-578-9243

Neil J. Brown

Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

3/15/17

Date:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01

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.

J = Estimated value.

U = Analyte was analyzed for but not detected.

Criteria Qualifiers and Shading

† = Concentration exceeds the most stringent MAC.

m = Concentration exceeds the MAC for an MSA.

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

 = Concentration exceeds applicable comparison criteria.

PTB #172-27; Work Order 46, Contract 64E26 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-74 (Residence)	Comparison Criteria					
		MACs			TACO		
BORING	1314V3-74-B01	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-74-B01 (0-2)						
MATRIX	Soil						
DEPTH (feet)	0-2						
pH	9						
VOCs (None Detected)							
SVOCs (mg/kg)							
Benzo(a)anthracene	0.025 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.031 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.046	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.024 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.017 J	9	--	--	9	1,700	--
Chrysene	0.03 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.01 J	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.05	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.019 J	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.023 J	--	--	--	--	--	--
Pyrene	0.048	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)							
Antimony	0.73 J	5	--	--	31	82	--
Arsenic	3.7	11.3	13	--	13	61	--
Barium	43 J	1,500	--	--	5,500	14,000	--
Beryllium	0.45 J	22	--	--	160	410	--
Boron	5 J	40	--	--	16,000	41,000	--
Cadmium	0.24 J	5.2	--	--	78	200	--
Calcium	48,000	--	--	--	--	--	--
Chromium	10 J	21	--	--	230	690	--
Cobalt	5.6 J	20	--	--	4,700	12,000	--
Copper	12	2,900	--	--	2,900	8,200	--
Iron	13,000	15,000	15,900	--	--	--	--
Lead	9	107	--	--	400	700	--
Magnesium	24,000	325,000	--	--	--	730,000	--
Manganese	330	630	636	--	1,600	4,100	--
Mercury	0.022	0.89	--	--	10	0.1	--
Nickel	13 J	100	--	--	1,600	4,100	--
Potassium	1,400 J	--	--	--	--	--	--
Selenium	0.31 J	1.3	--	--	390	1,000	--
Sodium	640	--	--	--	--	--	--
Thallium	0.98 J	2.6	--	--	6.3	160	--
Vanadium	16	550	--	--	550	1,400	--
Zinc	34 J	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)							
Barium	0.58	--	--	--	--	--	2
Cadmium	0.0025 J	--	--	--	--	--	0.005
Manganese	0.95 L	--	--	--	--	--	0.15
SPLP Metals (mg/L)							
Manganese	1.1 L	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-120748-1
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

Jodie Bracken

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LINKS

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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



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	10
Certification Summary	11
Chain of Custody	12
Receipt Checklists	13

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Job ID: 500-120748-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120748-1

Comments

No additional comments.

Receipt

The samples were received on 11/30/2016 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0° C and 3.9° C.

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample was outside the upper control limit: 1314V3-74-B01 (0-2) (500-120748-1). This sample did not contain any target analytes; therefore, re-analysis was not performed.

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: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 363857 had 1 analyte outside control limits: Carbazole. These results have been reported and qualified. (LCS 500-363857/2-A)

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

Metals

Method(s) 6010B: The instrument blank for analytical batch 500-363473 at line 100 contained Iron greater than the reporting limit (RL); associated samples were not reanalyzed because they contained Iron greater than 10 times the amount found in the instrument blank. The data have been qualified and reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Client Sample ID: 1314V3-74-B01 (0-2)

Lab Sample ID: 500-120748-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.023	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.050		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.048		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.025	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.030	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.046		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	0.031	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.019	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.010	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.73	J F1	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.7		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	43	F1	0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45	F1	0.21	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	5.0	F1	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24	F1	0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	48000	B	10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B F1	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.6	F1	0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	9.0		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	13	F1 B	0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400	F1	26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J F1	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		51	6.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.98	F1	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	34	F1	1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.078	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.95		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	9.0		0.2	0.2	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 - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120748-1	1314V3-74-B01 (0-2)	Solid	11/29/16 09:55	11/30/16 10:20

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Client Sample ID: 1314V3-74-B01 (0-2)

Lab Sample ID: 500-120748-1

Date Collected: 11/29/16 09:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128	X	70 - 120	11/30/16 13:20	12/02/16 19:55	1
Dibromofluoromethane	98		75 - 120	11/30/16 13:20	12/02/16 19:55	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	11/30/16 13:20	12/02/16 19:55	1
Toluene-d8 (Surr)	108		75 - 123	11/30/16 13:20	12/02/16 19:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Client Sample ID: 1314V3-74-B01 (0-2)

Lab Sample ID: 500-120748-1

Date Collected: 11/29/16 09:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Phenanthrene	0.023	J	0.037	0.0052	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Carbazole	<0.19	*	0.19	0.093	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Fluoranthene	0.050		0.037	0.0069	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Pyrene	0.048		0.037	0.0074	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Benzo[a]anthracene	0.025	J	0.037	0.0050	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Client Sample ID: 1314V3-74-B01 (0-2)

Lab Sample ID: 500-120748-1

Date Collected: 11/29/16 09:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.030	J	0.037	0.010	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Benzo[b]fluoranthene	0.046		0.037	0.0080	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Benzo[k]fluoranthene	0.017	J	0.037	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Benzo[a]pyrene	0.031	J	0.037	0.0072	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Indeno[1,2,3-cd]pyrene	0.019	J	0.037	0.0096	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Dibenz(a,h)anthracene	0.010	J	0.037	0.0072	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Benzo[g,h,i]perylene	0.024	J	0.037	0.012	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/06/16 16:39	12/07/16 12:48	1
Phenol-d5	95		36 - 123	12/06/16 16:39	12/07/16 12:48	1
Nitrobenzene-d5	85		33 - 124	12/06/16 16:39	12/07/16 12:48	1
2-Fluorobiphenyl	79		42 - 115	12/06/16 16:39	12/07/16 12:48	1
2,4,6-Tribromophenol	55		25 - 130	12/06/16 16:39	12/07/16 12:48	1
Terphenyl-d14	89		25 - 150	12/06/16 16:39	12/07/16 12:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.73	J F1	1.0	0.21	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Arsenic	3.7		0.51	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Barium	43	F1	0.51	0.094	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Beryllium	0.45	F1	0.21	0.044	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Boron	5.0	F1	2.6	0.36	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Cadmium	0.24	F1	0.10	0.030	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Calcium	48000	B	10	3.3	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Chromium	10	B F1	0.51	0.088	mg/Kg	☼	12/02/16 09:27	12/03/16 21:26	1
Cobalt	5.6	F1	0.26	0.058	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Copper	12		0.51	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Iron	13000	B ^	10	4.0	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Lead	9.0		0.26	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Magnesium	24000		5.1	2.1	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Manganese	330		0.51	0.10	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Nickel	13	F1 B	0.51	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Potassium	1400	F1	26	4.2	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Selenium	0.31	J F1	0.51	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Sodium	640		51	6.8	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Thallium	0.98	F1	0.51	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Vanadium	16		0.26	0.075	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Zinc	34	F1	1.0	0.32	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 22:24	1
Boron	0.078	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Client Sample ID: 1314V3-74-B01 (0-2)

Lab Sample ID: 500-120748-1

Date Collected: 11/29/16 09:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0025	J	0.0050	0.0020	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Iron	<0.40		0.40	0.20	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Manganese	0.95		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Silver	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/02/16 14:06	12/03/16 22:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.1		0.025	0.010	mg/L	-	12/02/16 14:10	12/05/16 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/02/16 14:06	12/05/16 12:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/02/16 14:06	12/05/16 12:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/02/16 10:45	12/05/16 12:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.017	0.0091	mg/Kg	☼	11/30/16 14:45	12/02/16 09:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.0		0.2	0.2	SU	-		12/02/16 17:07	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

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

Metals

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

Glossary

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

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120748-1

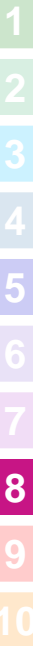
Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

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

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





500-120748 COC

Report To (optional) _____ Bill To (optional) _____
 Contact: _____ Contact: _____
 Company: _____ Company: _____
 Address: _____ Address: _____
 Address: _____ Address: _____
 Phone: _____ Phone: _____
 Fax: _____ Fax: _____
 E-Mail: _____ PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-120748
 Chain of Custody Number: EE86-04
 Page _____ of _____
 Temperature °C of Cooler: 39.30

Client		Client Project #		Preservative		Parameter										Preservative Key		
EE		1009008.0046-01														1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name		Lab Project #																
I 174																		
Project Location/State		Lab PM																
Rock Island County, IL																		
Sampler																		
S-Coapr																		
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix											Comments	
			Date	Time														
1		1314V3-74-R01 (0-2)	11/29/16	09:55	25		Vac	Soc	TotM TRC	Mobil	20011001 TRC Mobil							6YE26

Turnaround Time Required (Business Days):
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Requested Due Date: _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<i>S</i>	EE	11-29-16	11:5	<i>Ami Smith TR-CHT</i>	TR-CHT	11/30/16	10:20

Lab Courier: _____
 Shipped: *FedEx*
 Hand Delivered: _____

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

Client Comments:

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120748-1

Login Number: 120748

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9,3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

