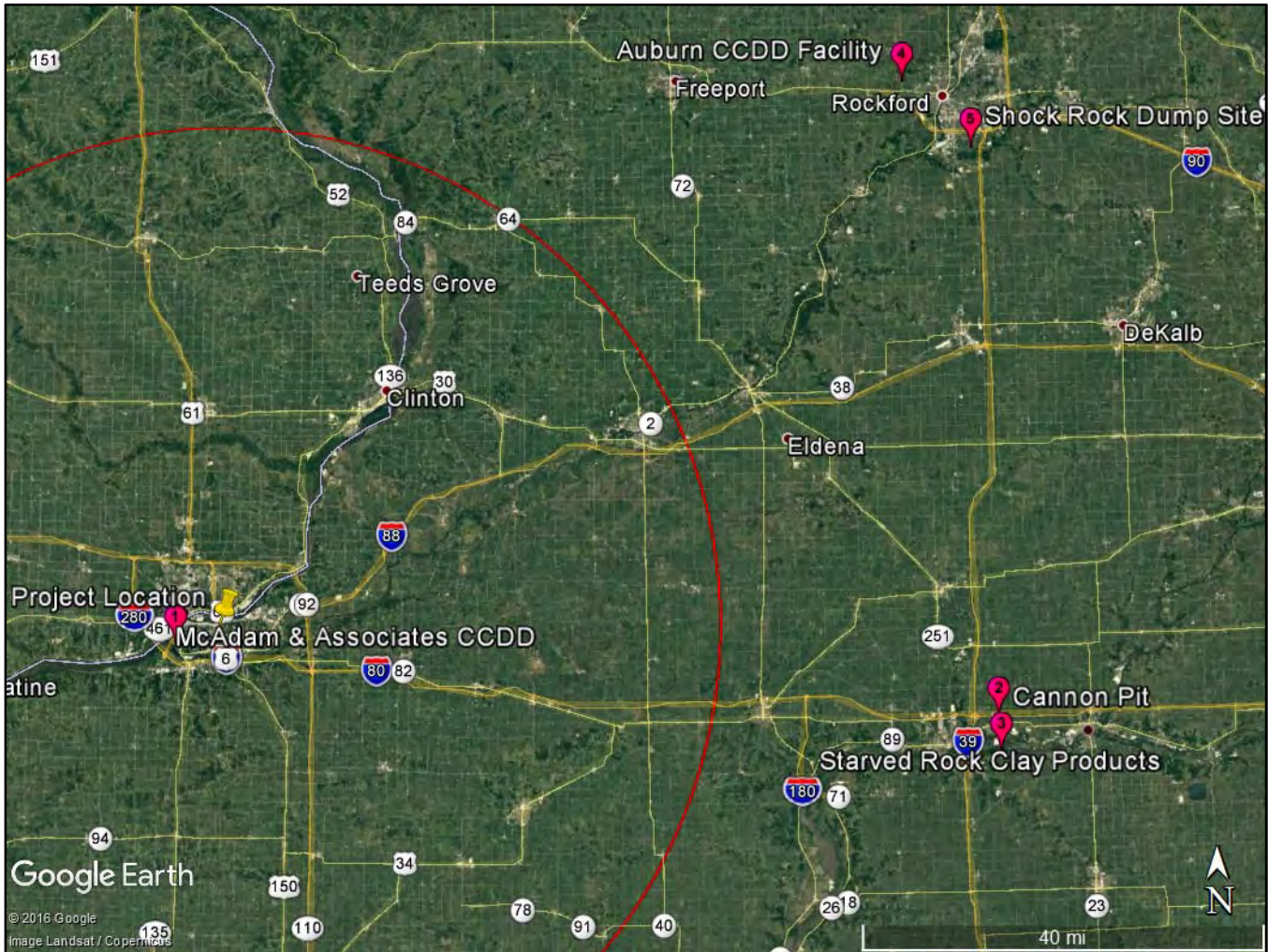


CCDD/USFO Facilities within 100 miles of project location
FAI 74 (Interstate 74), Contract No. 64C08
Moline, Rock Island County, Illinois



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: -90.5085

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 1314V3-01-B01, -B02, -B05, -B06, -B07, -B08, -B09, -B10, and -B11 and 1314V3-18-B01 and -B06 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, 4-2, 4-4, 4-5, 4-9, and 4-16.

- 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 J121005-2, J121121-2, J121163-1, J121504-2, and J121504-3.

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.

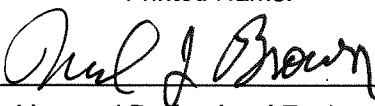
Street Address: 33 West Monroe Street

City: Chicago State: IL Zip Code: 60603

Phone: (312) 578-9243

Neil J. Brown

Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

3-17-17

Date:



Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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 64C08 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (IDOT ROW)					Comparison Criteria							
	1314V3-01-B01		1314V3-01-B02	1314V3-01-B05		MACs		TACO					
BORING	1314V3-01-B01 (0-6)		1314V3-01-B01 (6-11)	1314V3-01-B02 (0-8)	1314V3-01-B05 (0-6)	1314V3-01-B05 (6-12)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	Groundwater
SAMPLE	Soil	Soil	Soil	Soil	Soil								
MATRIX	0-6	6-11	0-8	0-6	6-12								
DEPTH (feet)	8.2	7.7	7.7	8.5	8.2								
pH													
VOCs (mg/kg)													
2-Butanone (MEK)	0.011	0.012	0.0072	0.02	0.02	--	--	--	--	--	--	--	--
Acetone	0.062	0.054	0.04	0.09	0.097	25	--	--	70,000	100,000	--	--	6.3
SVOCs (mg/kg)													
2-Methylnaphthalene	0.017 J	ND U	ND U	0.083	0.039 J	--	--	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	0.086	0.11	570	--	--	4,700	120,000	--	--	0.42
Acenaphthylene	0.0059 J	ND U	ND U	0.038	0.0053 J	--	--	--	--	--	--	--	--
Anthracene	0.022 J	ND U	ND U	0.28	0.28	12,000	--	--	23,000	610,000	--	--	2.1
Benzo(a)anthracene	0.077	ND U	0.012 J	0.51	0.47	0.9	1.8	1.1	1.8	170	--	--	0.00013
Benzo(a)pyrene	0.069	ND U	0.015 J	0.43 †	0.37 †	0.09	2.1	1.3	2.1	17	--	--	0.0002
Benzo(b)fluoranthene	0.09	ND U	ND U	0.54	0.47	0.9	2.1	1.5	2.1	170	--	--	0.00018
Benzo(g,h,i)perylene	0.029 J	ND U	ND U	0.14	0.12	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	0.042	ND U	ND U	0.2	0.17	9	--	--	9	1,700	--	--	0.00017
Carbazole	ND U	ND U	ND U	0.12 J	0.13 J	0.6	--	--	32	6,200	--	--	--
Chrysene	0.074	ND U	0.016 J	0.49	0.41	88	--	--	88	17,000	--	--	0.0015
Dibenz(a,h)anthracene	ND U	ND U	ND U	0.043	0.038 J	0.09	0.42	0.2	0.42	17	--	--	0.0003
Dibenzofuran	ND U	ND U	ND U	0.062 J	0.08 J	--	--	--	--	--	--	--	--
Diethyl phthalate	ND U	ND U	0.22	ND U	ND U	470	--	--	2,000	2,000	--	--	5.6
Fluoranthene	0.16	0.016 J	0.036 J	1.1	1	3,100	--	--	3,100	82,000	--	--	0.28
Fluorene	0.0084 J	ND U	ND U	0.11	0.1	560	--	--	3,100	82,000	--	--	0.28
Indeno(1,2,3-cd)pyrene	0.026 J	ND U	ND U	0.14	0.12	0.9	1.6	0.9	1.6	170	--	--	0.00043
Naphthalene	0.013 J	ND U	ND U	0.077	0.042	1.8	--	--	170	1.8	--	--	0.14
Phenanthrene	0.11	0.017 J	0.026 J	1.1	1.1	--	--	--	--	--	--	--	--
Pyrene	0.14	0.013 J	0.034 J	1	0.91	2300	--	--	2,300	61,000	--	--	0.21
Inorganics (mg/kg)													
Antimony	1 J	0.43 J	0.55 J	4.7	0.68 J	5	--	--	31	82	--	--	0.006
Arsenic	4.2	2	4.1	8.4	3.9	11.3	13	--	13	61	--	--	0.05
Barium	83	49	91	120	100	1,500	--	--	5,500	14,000	--	--	2
Beryllium	0.66	0.37	0.56	0.55	0.57	22	--	--	160	410	--	--	0.004
Boron	15	6.8	6.5	6.2	4.1	40	--	--	16,000	41,000	--	--	2
Cadmium	1.9	0.15	0.24	0.49	0.26	5.2	--	--	78	200	--	--	0.005
Calcium	41,000	8,400	29,000	7,500	9,800	--	--	--	--	--	--	--	--
Chromium	10	8.6	13	17	15	21	--	--	230	690	--	--	0.1
Cobalt	5.7	4.8	5.8	8.5	6.1	20	--	--	4,700	12,000	--	--	1
Copper	25	8.7	14	35	23	2,900	--	--	2,900	8,200	--	--	0.65
Iron	18,000 †m	13,000	15,000	33,000 †m	20,000 †m	15,000	15,900	--	--	--	--	--	5
Lead	78	13	21	41	57	107	--	--	400	700	--	--	0.0075
Magnesium	2,300	3,700	2,400	3,700	3,300	325,000	--	--	--	730,000	--	--	--
Manganese	430	300	390	370	400	630	636	--	1,600	4,100	--	--	0.15
Mercury	0.12	0.012 J	0.17	0.16	0.47	0.89	--	--	10	0.1	--	--	0.002
Nickel	13	12	12	30	15	100	--	--	1,600	4,100	--	--	0.1
Potassium	1,200	650	1,000	1,400	1,600	--	--	--	--	--	--	--	--
Selenium	ND U	0.37 J	ND U	0.32 J	ND U	1.3	--	--	390	1,000	--	--	0.05
Silver	0.084 J	ND U	ND U	ND U	0.07 J	4.4	--	--	390	1,000	--	--	0.05
Sodium	380	180	170	790	450	--	--	--	--	--	--	--	--
Thallium	0.96	0.68	0.87	1.3	1	2.6	--	--	6.3	160	--	--	0.002
Vanadium	17	15	20	26	17	550	--	--	550	1,400	--	--	0.049
Zinc	1,100	48	55	120	110	5,100	--	--	23,000	61,000	--	--	5
TCLP Metals (mg/L)													
Barium	0.95	0.68	1	0.85	0.6	--	--	--	--	--	--	2	--
Boron	0.27 J	0.22 J	0.14 J	0.17 J	0.19 J	--	--	--	--	--	--	2	--
Cadmium	ND U	0.0021 J	ND U	0.0079 L	0.0022 J	--	--	--	--	--	--	0.005	--
Cobalt	0.023 J	0.036	0.017 J	0.037	0.023 J	--	--	--	--	--	--	1	--
Iron	ND U	ND U	ND U	ND U	0.3 J	--	--	--	--	--	--	5	--
Lead	0.014 L	ND U	ND U	0.025 L	0.025 L	--	--	--	--	--	--	0.0075	--
Manganese	3.3 L	5.3 L	6.2 L	8 L	6.5 L	--	--	--	--	--	--	0.15	--
Nickel	0.025	0.04	0.017 J	0.071	0.023 J	--	--	--	--	--	--	0.1	--
Zinc	0.23 J	0.15 J	0.071 J	0.67	0.51	--	--	--	--	--	--	5	--
SPLP Metals (mg/L)													
Cadmium	NA	NA	NA	ND U	NA	--	--	--	--	--	--	0.005	--
Lead	0.014 L	NA	NA	0.21 L	0.18 L	--	--	--	--	--	--	0.0075	--
Manganese	0.02 J	0.077	0.27 L	1.2 L	0.99 L	--	--	--	--	--	--	0.15	--

PTB #172-27; Work Order 46, Contract 64C08 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (IDOT ROW)					Comparison Criteria							
	1314V3-01-B06			1314V3-01-B07		MACs			TACO				
BORING	1314V3-01-B06 (0-8)	1314V3-01-B06 (8-15)	1314V3-01-B06 (8-15)D	1314V3-01-B07 (0-6)	1314V3-01-B07 (6-12)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	Groundwater	
SAMPLE	Soil	Soil	Soil	Soil	Soil								
MATRIX	Soil	Soil	Soil	Soil	Soil								
DEPTH (feet)	0-8	8-15	8-15	0-6	6-12								
pH	7.9	7.8	7.9	7.8	7.6								
VOCs (mg/kg)													
2-Butanone (MEK)	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	
Acetone	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--	6.3	
SVOCs (mg/kg)													
2-Methylnaphthalene	0.021 J	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	
Acenaphthene	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--	0.42	
Acenaphthylene	ND U	ND U	ND U	0.0052 J	ND U	--	--	--	--	--	--	--	
Anthracene	0.022 J	ND U	ND U	0.0088 J	ND U	12,000	--	--	23,000	610,000	--	2.1	
Benzo(a)anthracene	0.074	ND U	ND U	0.037	ND U	0.9	1.8	1.1	1.8	170	--	0.0013	
Benzo(a)pyrene	0.066	ND U	ND U	0.041	ND U	0.09	2.1	1.3	2.1	17	--	0.0002	
Benzo(b)fluoranthene	0.083	ND U	ND U	0.067	ND U	0.9	2.1	1.5	2.1	170	--	0.0018	
Benzo(g,h,i)perylene	0.038	ND U	ND U	0.017 J	ND U	--	--	--	--	--	--	--	
Benzo(k)fluoranthene	0.033 J	ND U	ND U	0.021 J	ND U	9	--	--	9	1,700	--	0.0017	
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--	--	
Chrysene	0.076	ND U	ND U	0.046	ND U	88	--	--	88	17,000	--	0.0015	
Dibenz(a,h)anthracene	0.01 J	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--	0.0003	
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	
Diethyl phthalate	0.076 J	ND U	ND U	ND U	ND U	470	--	--	2,000	2,000	--	5.6	
Fluoranthene	0.18	ND U	0.0082 J	0.084	ND U	3,100	--	--	3,100	82,000	--	0.28	
Fluorene	ND U	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--	0.28	
Indeno(1,2,3-cd)pyrene	0.034 J	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--	0.00043	
Naphthalene	0.012 J	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--	0.14	
Phenanthrene	0.12	0.0056 J	0.0069 J	0.046	ND U	--	--	--	--	--	--	--	
Pyrene	0.15	ND U	ND U	0.076	ND U	2300	--	--	2,300	61,000	--	0.21	
Inorganics (mg/kg)													
Antimony	0.28 J	0.33 J	ND U	0.41 J	0.34 J	5	--	--	31	82	--	0.006	
Arsenic	4.1	4.5	3.8	4.1	2.9	11.3	13	--	13	61	--	0.05	
Barium	77	84	82	74	82	1,500	--	--	5,500	14,000	--	2	
Beryllium	0.55	0.53	0.51	0.52	0.46	22	--	--	160	410	--	0.004	
Boron	4.9	2.5 J	2.2 J	4.8	2.4 J	40	--	--	16,000	41,000	--	2	
Cadmium	0.34	0.15	0.17	0.28	0.17	5.2	--	--	78	200	--	0.005	
Calcium	16,000	5,800	6,400	19,000	3,200	--	--	--	--	--	--	--	
Chromium	12	15	14	11	13	21	--	--	230	690	--	0.1	
Cobalt	5.3	7.4	5.8	5	5.1	20	--	--	4,700	12,000	--	1	
Copper	14	12	12	13	10	2,900	--	--	2,900	8,200	--	0.65	
Iron	13,000	16,000 †m	14,000	13,000	13,000	15,000	15,900	--	--	--	--	5	
Lead	42	8.2	8.1	49	7.2	107	--	--	400	700	--	0.0075	
Magnesium	4,800	3,400	4,000	5,100	2,300	325,000	--	--	--	730,000	--	--	
Manganese	360	440	380	250	350	630	636	--	1,600	4,100	--	0.15	
Mercury	0.2	0.029	0.019 J	0.18	0.011 J	0.89	--	--	10	0.1	--	0.002	
Nickel	12	15	14	12	13	100	--	--	1,600	4,100	--	0.1	
Potassium	980	930	920	940	870	--	--	--	--	--	--	--	
Selenium	ND U	ND U	ND U	ND U	ND U	1.3	--	--	390	1,000	--	0.05	
Silver	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--	0.05	
Sodium	290	210	210	510	130	--	--	--	--	--	--	--	
Thallium	0.67	0.97	0.92	0.66	0.8	2.6	--	--	6.3	160	--	0.002	
Vanadium	17	22	19	16	16	550	--	--	550	1,400	--	0.049	
Zinc	88	36	33	65	32	5,100	--	--	23,000	61,000	--	5	
TCLP Metals (mg/L)													
Barium	0.77	0.3 J	0.33 J	0.87	0.19 J	--	--	--	--	--	2	--	
Boron	0.11 J	0.052 J	0.073 J	0.14 J	0.06 J	--	--	--	0.14	--	2	--	
Cadmium	0.0028 J	ND U	ND U	0.003 J	ND U	--	--	--	--	--	0.005	--	
Cobalt	0.017 J	ND U	ND U	0.022 J	ND U	--	--	--	--	--	1	--	
Iron	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5	--	
Lead	0.013 L	ND U	ND U	0.013 L	ND U	--	--	--	--	--	0.0075	--	
Manganese	4.1 L	0.043	0.097	5.6 L	ND U	--	--	--	--	--	0.15	--	
Nickel	0.018 J	ND U	ND U	0.023 J	ND U	--	--	--	--	--	0.1	--	
Zinc	0.13 J	0.022 J	ND U	0.16 J	ND U	--	--	--	--	--	5	--	
SPLP Metals (mg/L)													
Cadmium	NA	NA	NA	NA	NA	--	--	--	--	--	0.005	--	
Lead	0.054 L	NA	NA	0.017 L	NA	--	--	--	--	--	0.0075	--	
Manganese	0.34 L	NA	NA	0.066	NA	--	--	--	--	--	0.15	--	

**PTB #172-27; Work Order 46, Contract 64C08 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-1 (IDOT ROW)				Comparison Criteria							
	1314V3-01-B08		1314V3-01-B09		MACs			TACO				
BORING	1314V3-01-B08 (0-4)		1314V3-01-B09 (0-6)		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	Groundwater	
SAMPLE	1314V3-01-B08 (0-4)	1314V3-01-B08 (4-9)	1314V3-01-B09 (0-6)	1314V3-01-B09 (6-11.6)								
MATRIX	Soil	Soil	Soil	Soil								
DEPTH (feet)	0-4	4-9	0-6	6-11.6								
pH	7.7	7.7	8.6	8								
VOCs (mg/kg)												
2-Butanone (MEK)	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--	6.3	
SVOCs (mg/kg)												
2-Methylnaphthalene	ND U	ND U	ND U	0.1	--	--	--	--	--	--	--	
Acenaphthene	ND U	ND U	ND U	0.0091 J	570	--	--	4,700	120,000	--	0.42	
Acenaphthylene	ND U	ND U	ND U	0.013 J	--	--	--	--	--	--	--	
Anthracene	ND U	ND U	ND U	0.031 J	12,000	--	--	23,000	610,000	--	2.1	
Benzo(a)anthracene	0.023 J	ND U	ND U	0.069	0.9	1.8	1.1	1.8	170	--	0.00013	
Benzo(a)pyrene	0.026 J	ND U	ND U	0.061	0.09	2.1	1.3	2.1	17	--	0.0002	
Benzo(b)fluoranthene	0.038 J	ND U	ND U	0.1	0.9	2.1	1.5	2.1	170	--	0.00018	
Benzo(g,h,i)perylene	0.017 J	ND U	ND U	0.036 J	--	--	--	--	--	--	--	
Benzo(k)fluoranthene	0.015 J	ND U	ND U	0.037	9	--	--	9	1,700	--	0.00017	
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--	--	
Chrysene	0.034 J	ND U	ND U	0.09	88	--	--	88	17,000	--	0.0015	
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--	0.0003	
Dibenzofuran	ND U	ND U	ND U	0.045 J	--	--	--	--	--	--	--	
Diethyl phthalate	ND U	ND U	ND U	ND U	470	--	--	2,000	2,000	--	5.6	
Fluoranthene	0.057	ND U	0.012 J	0.15	3,100	--	--	3,100	82,000	--	0.28	
Fluorene	ND U	ND U	ND U	0.0097 J	560	--	--	3,100	82,000	--	0.28	
Indeno(1,2,3-cd)pyrene	0.016 J	ND U	ND U	0.027 J	0.9	1.6	0.9	1.6	170	--	0.00043	
Naphthalene	ND U	ND U	ND U	0.065	1.8	--	--	170	1.8	--	0.14	
Phenanthrene	0.032 J	ND U	0.011 J	0.17	--	--	--	--	--	--	--	
Pyrene	0.053	ND U	0.014 J	0.16	2300	--	--	2,300	61,000	--	0.21	
Inorganics (mg/kg)												
Antimony	0.27 J	0.27 J	0.46 J	0.44 J	5	--	--	31	82	--	0.006	
Arsenic	3.7	6.3	4.6	4.6	11.3	13	--	13	61	--	0.05	
Barium	100	76	35	55	1,500	--	--	5,500	14,000	--	2	
Beryllium	0.48	0.49	0.44	0.56	22	--	--	160	410	--	0.004	
Boron	3	1.7 J	3.5	8.6	40	--	--	16,000	41,000	--	2	
Cadmium	0.22	0.31	0.11	0.35	5.2	--	--	78	200	--	0.005	
Calcium	7,400	2,500	36,000	26,000	--	--	--	--	--	--	--	
Chromium	12	13	10	12	21	--	--	230	690	--	0.1	
Cobalt	5.5	6.9	5.3	5.3	20	--	--	4,700	12,000	--	1	
Copper	11	11	11	15	2,900	--	--	2,900	8,200	--	0.65	
Iron	12,000	15,000	15,000	14,000	15,000	15,900	--	--	--	--	5	
Lead	48	7.4	8.5	14	107	--	--	400	700	--	0.0075	
Magnesium	1,900	2,100	19,000	13,000	325,000	--	--	--	730,000	--	--	
Manganese	490	770 †m	340	290	630	636	--	1,600	4,100	--	0.15	
Mercury	0.04	0.022	0.019	0.036	0.89	--	--	10	0.1	--	0.002	
Nickel	11	19	13	13	100	--	--	1,600	4,100	--	0.1	
Potassium	880	660	790	780	--	--	--	--	--	--	--	
Selenium	0.35 J	ND U	0.76	0.54	1.3	--	--	390	1,000	--	0.05	
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--	0.05	
Sodium	310	180	530	200	--	--	--	--	--	--	--	
Thallium	0.91	1.4	0.91	0.89	2.6	--	--	6.3	160	--	0.002	
Vanadium	16	22	18	18	550	--	--	550	1,400	--	0.049	
Zinc	41	31	34	66	5,100	--	--	23,000	61,000	--	5	
TCLP Metals (mg/L)												
Barium	0.32 J	0.23 J	0.8	0.99	--	--	--	--	--	2	--	
Boron	0.12 J	0.05 J	ND U	ND U	--	--	--	--	--	2	--	
Cadmium	ND U	ND U	0.0034 J	0.0046 J	--	--	--	--	--	0.005	--	
Cobalt	ND U	ND U	0.023 J	0.021 J	--	--	--	--	--	1	--	
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5	--	
Lead	ND U	ND U	ND U	0.008 L	--	--	--	--	--	0.0075	--	
Manganese	1.1 L	ND U	7 L	8 L	--	--	--	--	--	0.15	--	
Nickel	ND U	ND U	0.032	0.025	--	--	--	--	--	0.1	--	
Zinc	0.03 J	ND U	0.02 J	0.19 J	--	--	--	--	--	5	--	
SPLP Metals (mg/L)												
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005	--	
Lead	NA	NA	NA	0.028 L	--	--	--	--	--	0.0075	--	
Manganese	0.29 L	NA	0.19 L	0.32 L	--	--	--	--	--	0.15	--	

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (IDOT ROW)			Comparison Criteria							
	1314V3-01-B10	1314V3-01-B11		MACs			TACO				
BORING	1314V3-01-B10	1314V3-01-B11		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	Groundwater	
SAMPLE	1314V3-01-B10 (0-6)	1314V3-01-B11 (0-8)	1314V3-01-B11 (8-15)								
MATRIX	Soil	Soil	Soil								
DEPTH (feet)	0-6	0-8	8-15								
pH	8.6	8.3	8.6								
VOCs (mg/kg)											
2-Butanone (MEK)	ND U	ND U	ND U	--	--	--	--	--	--	--	
Acetone	ND U	ND U	ND U	25	--	--	70,000	100,000	--	6.3	
SVOcs (mg/kg)											
2-Methylnaphthalene	ND U	ND U	ND U	--	--	--	--	--	--	--	
Acenaphthene	ND U	ND U	ND U	570	--	--	4,700	120,000	--	0.42	
Acenaphthylene	ND U	ND U	ND U	--	--	--	--	--	--	--	
Anthracene	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--	2.1	
Benzo(a)anthracene	0.043	ND U	ND U	0.9	1.8	1.1	1.8	170	--	0.00013	
Benzo(a)pyrene	0.057	ND U	ND U	0.09	2.1	1.3	2.1	17	--	0.0002	
Benzo(b)fluoranthene	0.073	ND U	ND U	0.9	2.1	1.5	2.1	170	--	0.00018	
Benzo(g,h,i)perylene	0.044	ND U	ND U	--	--	--	--	--	--	--	
Benzo(k)fluoranthene	0.026 J	ND U	ND U	9	--	--	9	1,700	--	0.00017	
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--	--	
Chrysene	0.046	ND U	ND U	88	--	--	88	17,000	--	0.0015	
Dibenz(a,h)anthracene	0.01 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--	0.0003	
Dibenzofuran	ND U	ND U	ND U	--	--	--	--	--	--	--	
Diethyl phthalate	ND U	ND U	ND U	470	--	--	2,000	2,000	--	5.6	
Fluoranthene	0.063	ND U	ND U	3,100	--	--	3,100	82,000	--	0.28	
Fluorene	ND U	ND U	ND U	560	--	--	3,100	82,000	--	0.28	
Indeno(1,2,3-cd)pyrene	0.035 J	ND U	ND U	0.9	1.6	0.9	1.6	170	--	0.00043	
Naphthalene	ND U	ND U	ND U	1.8	--	--	170	1.8	--	0.14	
Phenanthrene	0.026 J	ND U	ND U	--	--	--	--	--	--	--	
Pyrene	0.068	ND U	ND U	2300	--	--	2,300	61,000	--	0.21	
Inorganics(mg/kg)											
Antimony	ND U	ND U	ND U	5	--	--	31	82	--	0.006	
Arsenic	4	3.1	3.7	11.3	13	--	13	61	--	0.05	
Barium	54	68	58	1,500	--	--	5,500	14,000	--	2	
Beryllium	0.54	0.42	0.38	22	--	--	160	410	--	0.004	
Boron	1.7 J	2.3 J	2.1 J	40	--	--	16,000	41,000	--	2	
Cadmium	0.24	0.23	0.2	5.2	--	--	78	200	--	0.005	
Calcium	23,000	3,400	13,000	--	--	--	--	--	--	--	
Chromium	12	11	11	21	--	--	230	690	--	0.1	
Cobalt	6.9	5.2	5.2	20	--	--	4,700	12,000	--	1	
Copper	12	9	8.4	2,900	--	--	2,900	8,200	--	0.65	
Iron	12,000	10,000	11,000	15,000	15,900	--	--	--	--	5	
Lead	24	13	7.5	107	--	--	400	700	--	0.0075	
Magnesium	13,000	1,900	8,500	325,000	--	--	--	730,000	--	--	
Manganese	280	220	210	630	636	--	1,600	4,100	--	0.15	
Mercury	0.038	0.029	0.026	0.89	--	--	10	0.1	--	0.002	
Nickel	24	12	13	100	--	--	1,600	4,100	--	0.1	
Potassium	560	610	550	--	--	--	--	--	--	--	
Selenium	ND U	0.34 J	ND U	1.3	--	--	390	1,000	--	0.05	
Silver	ND U	ND U	ND U	4.4	--	--	390	1,000	--	0.05	
Sodium	350	540	840	--	--	--	--	--	--	--	
Thallium	ND U	ND U	ND U	2.6	--	--	6.3	160	--	0.002	
Vanadium	18	14	18	550	--	--	550	1,400	--	0.049	
Zinc	52	41	38	5,100	--	--	23,000	61,000	--	5	
TCLP Metals (mg/L)											
Barium	0.8	0.22 J	0.48 J	--	--	--	--	--	2	--	
Boron	0.055 J	0.082 J	0.063 J	--	--	--	--	--	2	--	
Cadmium	ND U	ND U	ND U	--	--	--	--	--	0.005	--	
Cobalt	ND U	ND U	ND U	--	--	--	--	--	1	--	
Iron	ND U	ND U	ND U	--	--	--	--	--	5	--	
Lead	ND U	ND U	ND U	--	--	--	--	--	0.0075	--	
Manganese	0.41 L	0.014 J	0.73 L	--	--	--	--	--	0.15	--	
Nickel	0.026	ND U	0.011 J	--	--	--	--	--	0.1	--	
Zinc	ND U	ND U	ND U	--	--	--	--	--	5	--	
SPLP Metals (mg/L)											
Cadmium	NA	NA	NA	--	--	--	--	--	0.005	--	
Lead	NA	NA	NA	--	--	--	--	--	0.0075	--	
Manganese	0.4 L	NA	0.71 L	--	--	--	--	--	0.15	--	

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-18 (Vacant Land)			Comparison Criteria					
	1314V3-18-B01			MACs			TACO		
BORING	1314V3-18-B01			Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-18-B01 (0-6)	1314V3-18-B01 (6-12)	1314V3-18-B01 (12-18)						
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-18						
pH	8.7	8.3	7.9						
VOCs (mg/kg)									
2-Butanone (MEK)	ND U	ND U	ND U	--	--	--	--	--	--
Acetone	ND U	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)									
2-Methylnaphthalene	0.059 J	0.019 J	0.0081 J	--	--	--	--	--	--
3 & 4 Methylphenol	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	0.012 J	0.009 J	ND U	--	--	--	--	--	--
Anthracene	0.019 J	0.016 J	0.012 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.047	0.037	0.025 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.052	0.034 J	0.026 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.085	0.061	0.037	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.025 J	0.018 J	0.012 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.03 J	0.019 J	ND U	9	--	--	9	1,700	--
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.056	0.048	0.032 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.088	0.068	0.064	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	0.006 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.021 J	0.015 J	0.01 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.039	0.011 J	0.0068 J	1.8	--	--	170	1.8	--
Phenanthrene	0.089	0.069	0.055	--	--	--	--	--	--
Pyrene	0.086	0.074	0.068	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	0.33 J	0.39 J	0.31 J	5	--	--	31	82	--
Arsenic	4.5	6.2	6	11.3	13	--	13	61	--
Barium	52	52	39	1,500	--	--	5,500	14,000	--
Beryllium	0.5	0.46	0.39	22	--	--	160	410	--
Boron	4.6	6.2	2.8	40	--	--	16,000	41,000	--
Cadmium	0.2	0.2	0.13	5.2	--	--	78	200	--
Calcium	80,000	54,000	35,000	--	--	--	--	--	--
Chromium	11	10	9.7	21	--	--	230	690	--
Cobalt	5.4	4.6	5.7	20	--	--	4,700	12,000	--
Copper	15	15	11	2,900	--	--	2,900	8,200	--
Iron	13,000	13,000	13,000	15,000	15,900	--	--	--	--
Lead	19	17	9.5	107	--	--	400	700	--
Magnesium	19,000	18,000	18,000	325,000	--	--	--	730,000	--
Manganese	370	320	290	630	636	--	1,600	4,100	--
Mercury	0.039	0.02	0.016 J	0.89	--	--	10	0.1	--
Nickel	13	11	13	100	--	--	1,600	4,100	--
Potassium	930	760	760	--	--	--	--	--	--
Selenium	0.34 J	0.37 J	0.62	1.3	--	--	390	1,000	--
Sodium	340	710	460	--	--	--	--	--	--
Thallium	0.89	0.76	0.86	2.6	--	--	6.3	160	--
Vanadium	19	18	16	550	--	--	550	1,400	--
Zinc	51	78	33	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.76	0.81	1	--	--	--	--	--	2
Boron	ND U	ND U	ND U	--	--	--	--	--	2
Cadmium	0.003 J	0.0047 J	0.0038 J	--	--	--	--	--	0.005
Cobalt	ND U	0.032	0.024 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.5 L	6.3 L	7.8 L	--	--	--	--	--	0.15
Nickel	0.013 J	0.041	0.032	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	--	--	--	--	--	0.05
Thallium	ND U	ND U	ND U	--	--	--	--	--	0.002
Zinc	0.076 J	0.096 J	0.021 J	--	--	--	--	--	5
SPLP Metals (mg/L)									
Cadmium	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.36 L	0.72 L	0.23 L	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-18 (Vacant Land)			Comparison Criteria					
	1314V3-18-B06			MACs			TACO		
BORING	1314V3-18-B06 (0-6)			Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-18-B06 (0-6)	1314V3-18-B06 (6-12)	1314V3-18-B06 (12-17)						
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-17						
pH	8.4	7.9	8						
VOCs (mg/kg)									
2-Butanone (MEK)	ND U	ND U	ND U	--	--	--	--	--	--
Acetone	ND U	ND U	0.021	25	--	--	70,000	100,000	--
SVOCs (mg/kg)									
2-Methylnaphthalene	0.21	0.23	0.0091 J	--	--	--	--	--	--
3 & 4 Methylphenol	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	0.041	0.0072 J	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	0.19	0.02 J	ND U	--	--	--	--	--	--
Anthracene	0.46	0.03 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.91 †	0.09	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.72 †	0.084	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.94 †	0.14	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.25	0.043	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.43	0.057	ND U	9	--	--	9	1,700	--
Carbazole	0.19	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.82	0.12	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.077	0.012 J	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	0.17 J	0.076 J	ND U	--	--	--	--	--	--
Fluoranthene	1.9	0.18	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.099	0.0089 J	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.24	0.036 J	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.13	0.17	ND U	1.8	--	--	170	1.8	--
Phenanthrene	1.6	0.22	0.0072 J	--	--	--	--	--	--
Pyrene	1.6	0.17	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	0.54 J	0.62 J	0.27 J	5	--	--	31	82	--
Arsenic	5.6	7.3	2.5	11.3	13	--	13	61	--
Barium	63	76	49	1,500	--	--	5,500	14,000	--
Beryllium	0.55	0.68	0.41	22	--	--	160	410	--
Boron	7.1	14	2 J	40	--	--	16,000	41,000	--
Cadmium	0.42	0.32	ND U	5.2	--	--	78	200	--
Calcium	28,000	14,000	3,300	--	--	--	--	--	--
Chromium	12	11	10	21	--	--	230	690	--
Cobalt	4.7	5.6	4.5	20	--	--	4,700	12,000	--
Copper	17	19	8.1	2,900	--	--	2,900	8,200	--
Iron	13,000	20,000 †m	10,000	15,000	15,900	--	--	--	--
Lead	23	39	6.6	107	--	--	400	700	--
Magnesium	14,000	4,300	1,800	325,000	--	--	--	730,000	--
Manganese	280	220	210	630	636	--	1,600	4,100	--
Mercury	0.045	0.19	0.014 J	0.89	--	--	10	0.1	--
Nickel	12	13	9.3	100	--	--	1,600	4,100	--
Potassium	850	790	580	--	--	--	--	--	--
Selenium	0.45	0.93	0.37 J	1.3	--	--	390	1,000	--
Sodium	560	270	110	--	--	--	--	--	--
Thallium	1	1	0.7	2.6	--	--	6.3	160	--
Vanadium	20	19	16	550	--	--	550	1,400	--
Zinc	86	120	24	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.7	0.83	1.3	--	--	--	--	--	2
Boron	ND U	ND U	ND U	--	--	--	--	--	2
Cadmium	0.0042 J	0.0079 L	0.0023 J	--	--	--	--	--	0.005
Cobalt	ND U	0.048	0.032	--	--	--	--	--	1
Iron	ND U	0.84	ND U	--	--	--	--	--	5
Lead	ND U	0.015 L	ND U	--	--	--	--	--	0.0075
Manganese	1.4 L	9.1 L	14 L	--	--	--	--	--	0.15
Nickel	0.01 J	0.047	0.041	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	--	--	--	--	--	0.05
Thallium	ND U	ND U	ND U	--	--	--	--	--	0.002
Zinc	0.16 J	0.35 J	0.062 J	--	--	--	--	--	5
SPLP Metals (mg/L)									
Cadmium	NA	ND U	NA	--	--	--	--	--	0.005
Lead	NA	0.03 L	NA	--	--	--	--	--	0.0075
Manganese	0.34 L	0.14	0.17 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: 500-121005-2
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

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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.

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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

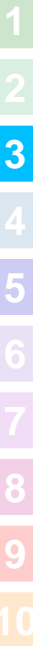
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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-B11 (0-8)

Lab Sample ID: 500-121005-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	68		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	3400		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.57	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	9.0		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1900		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	610		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	540		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	41		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.22	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.029		0.018	0.0092	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B11 (8-15)

Lab Sample ID: 500-121005-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.7		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		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	0.20		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	13000		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	8.4		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	7.5		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8500		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	550		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	840		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	38		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.73		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	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: 500-121005-2

Client Sample ID: 1314V3-01-B11 (8-15) (Continued)

Lab Sample ID: 500-121005-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.71		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.018	0.0095	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
500-121005-11	1314V3-01-B11 (0-8)	Solid	12/05/16 15:05	12/06/16 10:30
500-121005-12	1314V3-01-B11 (8-15)	Solid	12/05/16 15:15	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0092	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
2-Butanone (MEK)	<0.0053		0.0053	0.0023	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chlorobenzene	<0.0021		0.0021	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,2-Dichloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
2-Hexanone	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Tetrachloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Vinyl acetate	<0.0053		0.0053	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/06/16 13:50	12/07/16 18:38	1
Dibromofluoromethane	100		75 - 120	12/06/16 13:50	12/07/16 18:38	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/06/16 13:50	12/07/16 18:38	1
Toluene-d8 (Surr)	101		75 - 123	12/06/16 13:50	12/07/16 18:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

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	☼	12/12/16 09:38	12/13/16 23:10	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		40 - 130	12/12/16 09:38	12/13/16 23:10	1
Phenol-d5	79		36 - 123	12/12/16 09:38	12/13/16 23:10	1
Nitrobenzene-d5	70		33 - 124	12/12/16 09:38	12/13/16 23:10	1
2-Fluorobiphenyl	72		42 - 115	12/12/16 09:38	12/13/16 23:10	1
2,4,6-Tribromophenol	32		25 - 130	12/12/16 09:38	12/13/16 23:10	1
Terphenyl-d14	87		25 - 150	12/12/16 09:38	12/13/16 23:10	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	☼	12/08/16 15:09	12/09/16 14:25	1
Arsenic	3.1		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Barium	68		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Beryllium	0.42		0.23	0.049	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Boron	2.3 J		2.8	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Cadmium	0.23		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Calcium	3400		11	3.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Chromium	11 B		0.57	0.097	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Cobalt	5.2		0.28	0.064	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Copper	9.0		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Iron	10000		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Lead	13		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Magnesium	1900		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Manganese	220		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Nickel	12		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Potassium	610		28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Selenium	0.34 J		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Sodium	540		57	7.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Vanadium	14		0.28	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Zinc	41		1.1	0.36	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.22 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:41	1
Boron	0.082 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:41	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

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		12/08/16 14:21	12/10/16 18:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:41	1
Manganese	0.014	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:41	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:41	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 17:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:20	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		12/08/16 12:45	12/09/16 09:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.018	0.0092	mg/Kg	☼	12/07/16 14:45	12/08/16 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/09/16 19:35	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-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/06/16 13:50	12/07/16 19:02	1
Dibromofluoromethane	100		75 - 120	12/06/16 13:50	12/07/16 19:02	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/06/16 13:50	12/07/16 19:02	1
Toluene-d8 (Surr)	103		75 - 123	12/06/16 13:50	12/07/16 19:02	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	☼	12/12/16 09:38	12/13/16 23:39	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

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	☼	12/12/16 09:38	12/13/16 23:39	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	89		40 - 130	12/12/16 09:38	12/13/16 23:39	1
Phenol-d5	82		36 - 123	12/12/16 09:38	12/13/16 23:39	1
Nitrobenzene-d5	76		33 - 124	12/12/16 09:38	12/13/16 23:39	1
2-Fluorobiphenyl	76		42 - 115	12/12/16 09:38	12/13/16 23:39	1
2,4,6-Tribromophenol	39		25 - 130	12/12/16 09:38	12/13/16 23:39	1
Terphenyl-d14	94		25 - 150	12/12/16 09:38	12/13/16 23:39	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	☼	12/08/16 15:09	12/09/16 14:30	1
Arsenic	3.7		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Barium	58		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Beryllium	0.38		0.23	0.049	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Boron	2.1 J		2.8	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Cadmium	0.20		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Calcium	13000		11	3.7	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Chromium	11 B		0.57	0.098	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Cobalt	5.2		0.28	0.064	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Copper	8.4		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Iron	11000		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Lead	7.5		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Magnesium	8500		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Manganese	210		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Nickel	13		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Potassium	550		28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Silver	<0.28		0.28	0.067	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Sodium	840		57	7.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Vanadium	18		0.28	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Zinc	38		1.1	0.36	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	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		12/08/16 14:21	12/10/16 18:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:48	1
Boron	0.063 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:48	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-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

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		12/08/16 14:21	12/10/16 18:48	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:48	1
Manganese	0.73		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Nickel	0.011	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:48	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.71		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 04:05	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		12/08/16 14:21	12/09/16 17:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:23	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 10:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018	0.0095	mg/Kg	☼	12/07/16 14:45	12/08/16 11:34	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 19:38	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

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		Parameter												Preservative Key			
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			
Project Name		Project Location/State		Lab Project #																	
ITM		Rab Island Cnty, IL		80812744																	
Sampler		Lab PM																			
S. Cooper		D. Wright																			
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers	Matrix	Voc	Sicc	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	
		Date	Time	Date	Time																
11		1314V3-01-B11 (0-8)		12/5/16	1505	2	S	X	X	X	X	X	X	X	X	X	X	X	X	X	64C08
12		1314V3-01-B11 (8-15)		12/5/16	1515	2	S	X	X	X	X	X	X	X	X	X	X	X	X	X	

Turnaround Time Required (Business Days)

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

Requested Due Date _____

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<i>[Signature]</i>	EE	12/5/16		<i>[Signature]</i>	TA-CERT	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: FedEx
 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:

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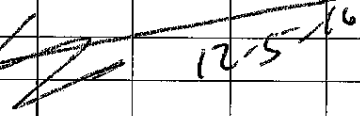
2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

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 #		Sampling		Date		Time		# of Containers		
IT4		50012744										
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix		
Rock Island County, IL		D. W. ...										
Sampler		Sample ID		Date		Time		# of Containers		Matrix		
S. Camp												
13	MS/MSD	1314V3-01-B334(0-7)	12-5-16	1615	2	S	X	X	X	X	X	64126
14	MS/MSD	1314V3-01-B334(7-14)	12-5-16	1620	2	S	X	X	X	X	X	
15	MS/MSD	1314V3-01-B334(14-20)	12-5-16	1624	2	S	X	X	X	X	X	
												

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

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 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	



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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121121-2
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:
12/21/2016 2:49:59 PM

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

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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

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Case Narrative

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

TestAmerica Job ID: 500-121121-2

Job ID: 500-121121-2

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-121121-2**

Comments

No additional comments.

Receipt

The samples were received on 12/7/2016 1:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3° C and 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 sample contained one acid surrogate outside acceptance limits: (500-121121-E-1-S MS). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

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

Metals

Method(s) 6020A: The continuing calibration verifications (CCV), at lines 49, 61 and 72, associated with batch 500-365046 recovered above the upper control limit for Thallium. Also, the low level CCV bracketing these samples were all within control limits. The samples associated with these CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (0-6)

Lab Sample ID: 500-121121-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.062		0.022	0.0094	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.011		0.0054	0.0024	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.013	J	0.040	0.0061	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.017	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0059	J	0.040	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0084	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.022	J	0.040	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.16		0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.14		0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.077		0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.074		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.090		0.040	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.042		0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.069		0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.026	J	0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.029	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	1.0	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.2		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	83		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.22	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.9		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	41000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.56	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.7		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	78		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2300	B	5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	430		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.084	J	0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Sodium	380		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.96		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	1100		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.95		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.27	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.014		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.23	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.014		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.020	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.12		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

Detection Summary

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (6-11)

Lab Sample ID: 500-121121-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.054		0.023	0.010	mg/Kg	1	☼	8260B	Total/NA	
2-Butanone (MEK)	0.012		0.0058	0.0026	mg/Kg	1	☼	8260B	Total/NA	
Phenanthrene	0.017	J	0.044	0.0061	mg/Kg	1	☼	8270D	Total/NA	
Fluoranthene	0.016	J	0.044	0.0081	mg/Kg	1	☼	8270D	Total/NA	
Pyrene	0.013	J	0.044	0.0087	mg/Kg	1	☼	8270D	Total/NA	
Antimony	0.43	J	1.3	0.27	mg/Kg	1	☼	6010B	Total/NA	
Arsenic	2.0		0.65	0.30	mg/Kg	1	☼	6010B	Total/NA	
Barium	49		0.65	0.12	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.37		0.26	0.056	mg/Kg	1	☼	6010B	Total/NA	
Boron	6.8		3.2	0.45	mg/Kg	1	☼	6010B	Total/NA	
Cadmium	0.15		0.13	0.038	mg/Kg	1	☼	6010B	Total/NA	
Calcium	8400	B	13	4.2	mg/Kg	1	☼	6010B	Total/NA	
Chromium	8.6	B	0.65	0.11	mg/Kg	1	☼	6010B	Total/NA	
Cobalt	4.8		0.32	0.073	mg/Kg	1	☼	6010B	Total/NA	
Copper	8.7		0.65	0.14	mg/Kg	1	☼	6010B	Total/NA	
Iron	13000		13	5.0	mg/Kg	1	☼	6010B	Total/NA	
Lead	13		0.32	0.16	mg/Kg	1	☼	6010B	Total/NA	
Magnesium	3700	B	6.5	2.6	mg/Kg	1	☼	6010B	Total/NA	
Manganese	300		0.65	0.13	mg/Kg	1	☼	6010B	Total/NA	
Nickel	12		0.65	0.18	mg/Kg	1	☼	6010B	Total/NA	
Potassium	650		32	5.3	mg/Kg	1	☼	6010B	Total/NA	
Selenium	0.37	J	0.65	0.32	mg/Kg	1	☼	6010B	Total/NA	
Sodium	180		65	8.6	mg/Kg	1	☼	6010B	Total/NA	
Thallium	0.68		0.65	0.32	mg/Kg	1	☼	6010B	Total/NA	
Vanadium	15		0.32	0.095	mg/Kg	1	☼	6010B	Total/NA	
Zinc	48		1.3	0.41	mg/Kg	1	☼	6010B	Total/NA	
Barium	0.68		0.50	0.050	mg/L	1		6010B	TCLP	
Boron	0.22	J B	0.50	0.050	mg/L	1		6010B	TCLP	
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP	
Cobalt	0.036		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	0.15	J	0.50	0.020	mg/L	1		6010B	TCLP	
Manganese	0.077		0.025	0.010	mg/L	1		6010B	SPLP East	
Mercury	0.012	J	0.019	0.010	mg/Kg	1	☼	7471B	Total/NA	
pH	7.7		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: 500-121121-2



Client Sample ID: 1314V3-01-B02 (0-8)

Lab Sample ID: 500-121121-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.040		0.019	0.0083	mg/Kg	1	☼		8260B	Total/NA
2-Butanone (MEK)	0.0072		0.0048	0.0021	mg/Kg	1	☼		8260B	Total/NA
Diethyl phthalate	0.22		0.20	0.067	mg/Kg	1	☼		8270D	Total/NA
Phenanthrene	0.026	J	0.039	0.0055	mg/Kg	1	☼		8270D	Total/NA
Fluoranthene	0.036	J	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	0.012	J	0.039	0.0053	mg/Kg	1	☼		8270D	Total/NA
Chrysene	0.016	J	0.039	0.011	mg/Kg	1	☼		8270D	Total/NA
Benzo[a]pyrene	0.015	J	0.039	0.0076	mg/Kg	1	☼		8270D	Total/NA
Antimony	0.55	J	1.2	0.25	mg/Kg	1	☼		6010B	Total/NA
Arsenic	4.1		0.59	0.27	mg/Kg	1	☼		6010B	Total/NA
Barium	91		0.59	0.11	mg/Kg	1	☼		6010B	Total/NA
Beryllium	0.56		0.24	0.051	mg/Kg	1	☼		6010B	Total/NA
Boron	6.5		3.0	0.41	mg/Kg	1	☼		6010B	Total/NA
Cadmium	0.24		0.12	0.034	mg/Kg	1	☼		6010B	Total/NA
Calcium	29000	B	12	3.8	mg/Kg	1	☼		6010B	Total/NA
Chromium	13	B	0.59	0.10	mg/Kg	1	☼		6010B	Total/NA
Cobalt	5.8		0.30	0.067	mg/Kg	1	☼		6010B	Total/NA
Copper	14		0.59	0.13	mg/Kg	1	☼		6010B	Total/NA
Iron	15000		12	4.6	mg/Kg	1	☼		6010B	Total/NA
Lead	21		0.30	0.15	mg/Kg	1	☼		6010B	Total/NA
Magnesium	2400	B	5.9	2.4	mg/Kg	1	☼		6010B	Total/NA
Manganese	390		0.59	0.12	mg/Kg	1	☼		6010B	Total/NA
Nickel	12		0.59	0.16	mg/Kg	1	☼		6010B	Total/NA
Potassium	1000		30	4.8	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: 500-121121-2

Client Sample ID: 1314V3-01-B02 (0-8) (Continued)

Lab Sample ID: 500-121121-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	170		59	7.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.87		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	1.0		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.14	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	6.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.071	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.17		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		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: 500-121121-2



Client Sample ID: 1314V3-01-B05 (0-6)

Lab Sample ID: 500-121121-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.090		0.021	0.0094	mg/Kg	1	*	*	8260B	Total/NA
2-Butanone (MEK)	0.020		0.0054	0.0024	mg/Kg	1	*	*	8260B	Total/NA
Naphthalene	0.077		0.038	0.0059	mg/Kg	1	*	*	8270D	Total/NA
2-Methylnaphthalene	0.083		0.078	0.0071	mg/Kg	1	*	*	8270D	Total/NA
Acenaphthylene	0.038		0.038	0.0051	mg/Kg	1	*	*	8270D	Total/NA
Acenaphthene	0.086		0.038	0.0069	mg/Kg	1	*	*	8270D	Total/NA
Dibenzofuran	0.062	J	0.19	0.045	mg/Kg	1	*	*	8270D	Total/NA
Fluorene	0.11		0.038	0.0054	mg/Kg	1	*	*	8270D	Total/NA
Phenanthrene	1.1		0.038	0.0054	mg/Kg	1	*	*	8270D	Total/NA
Anthracene	0.28		0.038	0.0064	mg/Kg	1	*	*	8270D	Total/NA
Carbazole	0.12	J	0.19	0.096	mg/Kg	1	*	*	8270D	Total/NA
Fluoranthene	1.1		0.038	0.0071	mg/Kg	1	*	*	8270D	Total/NA
Pyrene	1.0		0.038	0.0077	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]anthracene	0.51		0.038	0.0052	mg/Kg	1	*	*	8270D	Total/NA
Chrysene	0.49		0.038	0.011	mg/Kg	1	*	*	8270D	Total/NA
Benzo[b]fluoranthene	0.54		0.038	0.0083	mg/Kg	1	*	*	8270D	Total/NA
Benzo[k]fluoranthene	0.20		0.038	0.011	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]pyrene	0.43		0.038	0.0075	mg/Kg	1	*	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.038	0.010	mg/Kg	1	*	*	8270D	Total/NA
Dibenz(a,h)anthracene	0.043		0.038	0.0075	mg/Kg	1	*	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.14		0.038	0.012	mg/Kg	1	*	*	8270D	Total/NA
Antimony	4.7		1.1	0.23	mg/Kg	1	*	*	6010B	Total/NA
Arsenic	8.4		0.56	0.26	mg/Kg	1	*	*	6010B	Total/NA
Barium	120		0.56	0.10	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.55		0.22	0.048	mg/Kg	1	*	*	6010B	Total/NA
Boron	6.2		2.8	0.39	mg/Kg	1	*	*	6010B	Total/NA
Cadmium	0.49		0.11	0.032	mg/Kg	1	*	*	6010B	Total/NA
Calcium	7500	B	11	3.6	mg/Kg	1	*	*	6010B	Total/NA
Chromium	17	B	0.56	0.096	mg/Kg	1	*	*	6010B	Total/NA
Cobalt	8.5		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: 500-121121-2

Client Sample ID: 1314V3-01-B05 (0-6) (Continued)

Lab Sample ID: 500-121121-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	35		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	33000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	41		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3700	B	5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	30		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.32	J	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	790		56	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.56	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.85		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.17	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0079		0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.025		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	8.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.071		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.67		0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.21		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.2		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.16		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B05 (6-12)

Lab Sample ID: 500-121121-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.097		0.027	0.012	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.020		0.0069	0.0030	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.042		0.040	0.0062	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.039	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0053	J	0.040	0.0053	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.11		0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.080	J	0.20	0.047	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.10		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	1.1		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.28		0.040	0.0067	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.13	J	0.20	0.10	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.0		0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.91		0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.47		0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.41		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.47		0.040	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.17		0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.37		0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.12		0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.038	J	0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.68	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: 500-121121-2

Client Sample ID: 1314V3-01-B05 (6-12) (Continued)

Lab Sample ID: 500-121121-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.9		0.57	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	100		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	4.1		2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	9800	B	11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.57	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	57		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3300	B	5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	400		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Silver	0.070	J	0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Sodium	450		57	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	110		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.19	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.30	J	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.025		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	6.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.51		0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.18		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.99		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.47		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-B06 (0-8)

Lab Sample ID: 500-121121-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.012	J	0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.021	J	0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Diethyl phthalate	0.076	J	0.19	0.065	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.022	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.18		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.15		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.074		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.076		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.083		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.033	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.066		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.034	J	0.038	0.0099	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: 500-121121-2

Client Sample ID: 1314V3-01-B06 (0-8) (Continued)

Lab Sample ID: 500-121121-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	0.010	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.038		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	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	77		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.22	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	4.9		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.34		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	16000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.56	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	42		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4800	B	5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	980		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	290		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.67		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	88		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0028	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.013		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	4.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.054		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.34		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.20		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B06 (8-15)

Lab Sample ID: 500-121121-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0056	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.33	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.5		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	84		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	5800	B	12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.4		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		12	4.5	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: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15) (Continued)

Lab Sample ID: 500-121121-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.2		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3400	B	5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	930		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		59	7.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.97		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.30	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	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.022	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.029		0.019	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-B06 (8-15)D

Lab Sample ID: 500-121121-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0069	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0082	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.8		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	82		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.51		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	2.2	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	6400	B	12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	8.1		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4000	B	6.0	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	920		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		60	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.92		0.60	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	33		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.097		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.019	J	0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B07 (0-6)

Lab Sample ID: 500-121121-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.0052	J	0.036	0.0048	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: 500-121121-2

Client Sample ID: 1314V3-01-B07 (0-6) (Continued)

Lab Sample ID: 500-121121-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.046		0.036	0.0051	mg/Kg	1	*	*	8270D	Total/NA
Anthracene	0.0088	J	0.036	0.0061	mg/Kg	1	*	*	8270D	Total/NA
Fluoranthene	0.084		0.036	0.0068	mg/Kg	1	*	*	8270D	Total/NA
Pyrene	0.076		0.036	0.0072	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]anthracene	0.037		0.036	0.0049	mg/Kg	1	*	*	8270D	Total/NA
Chrysene	0.046		0.036	0.0099	mg/Kg	1	*	*	8270D	Total/NA
Benzo[b]fluoranthene	0.067		0.036	0.0079	mg/Kg	1	*	*	8270D	Total/NA
Benzo[k]fluoranthene	0.021	J	0.036	0.011	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]pyrene	0.041		0.036	0.0070	mg/Kg	1	*	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.036	0.012	mg/Kg	1	*	*	8270D	Total/NA
Antimony	0.41	J	1.1	0.23	mg/Kg	1	*	*	6010B	Total/NA
Arsenic	4.1		0.55	0.25	mg/Kg	1	*	*	6010B	Total/NA
Barium	74		0.55	0.10	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.52		0.22	0.048	mg/Kg	1	*	*	6010B	Total/NA
Boron	4.8		2.7	0.38	mg/Kg	1	*	*	6010B	Total/NA
Cadmium	0.28		0.11	0.032	mg/Kg	1	*	*	6010B	Total/NA
Calcium	19000	B	11	3.5	mg/Kg	1	*	*	6010B	Total/NA
Chromium	11	B	0.55	0.094	mg/Kg	1	*	*	6010B	Total/NA
Cobalt	5.0		0.27	0.062	mg/Kg	1	*	*	6010B	Total/NA
Copper	13		0.55	0.12	mg/Kg	1	*	*	6010B	Total/NA
Iron	13000		11	4.2	mg/Kg	1	*	*	6010B	Total/NA
Lead	49		0.27	0.14	mg/Kg	1	*	*	6010B	Total/NA
Magnesium	5100	B	5.5	2.2	mg/Kg	1	*	*	6010B	Total/NA
Manganese	250		0.55	0.11	mg/Kg	1	*	*	6010B	Total/NA
Nickel	12		0.55	0.15	mg/Kg	1	*	*	6010B	Total/NA
Potassium	940		27	4.5	mg/Kg	1	*	*	6010B	Total/NA
Sodium	510		55	7.2	mg/Kg	1	*	*	6010B	Total/NA
Thallium	0.66		0.55	0.27	mg/Kg	1	*	*	6010B	Total/NA
Vanadium	16		0.27	0.080	mg/Kg	1	*	*	6010B	Total/NA
Zinc	65		1.1	0.35	mg/Kg	1	*	*	6010B	Total/NA
Barium	0.87		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.14	J B	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0030	J	0.0050	0.0020	mg/L	1			6010B	TCLP
Cobalt	0.022	J	0.025	0.010	mg/L	1			6010B	TCLP
Lead	0.013		0.0075	0.0075	mg/L	1			6010B	TCLP
Manganese	5.6		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.023	J	0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.16	J	0.50	0.020	mg/L	1			6010B	TCLP
Lead	0.017		0.0075	0.0075	mg/L	1			6010B	SPLP East
Manganese	0.066		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.18		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-B07 (6-12)

Lab Sample ID: 500-121121-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Antimony	0.34	J	1.2	0.24	mg/Kg	1	*	*	6010B	Total/NA
Arsenic	2.9		0.58	0.27	mg/Kg	1	*	*	6010B	Total/NA
Barium	82		0.58	0.11	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.46		0.23	0.050	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: 500-121121-2

Client Sample ID: 1314V3-01-B07 (6-12) (Continued)

Lab Sample ID: 500-121121-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.4	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	3200	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	7.2		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2300	B	5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	870		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Sodium	130		58	7.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.19	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.060	J B	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.011	J	0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B08 (0-4)

Lab Sample ID: 500-121121-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.032	J	0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.057		0.040	0.0075	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.053		0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.023	J	0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.034	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.038	J	0.040	0.0088	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.026	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.016	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.27	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.7		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	100		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	3.0		3.0	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	7400	B	12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	48		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1900	B	5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	490		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	880		30	4.8	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: 500-121121-2

Client Sample ID: 1314V3-01-B08 (0-4) (Continued)

Lab Sample ID: 500-121121-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.35	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	310		59	7.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.91		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	41		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.030	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.29		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.040		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B08 (4-9)

Lab Sample ID: 500-121121-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.27	J	1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.3		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	76		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	2500	B	11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.9		0.29	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	7.4		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2100	B	5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	770		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	660		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.23	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.050	J B	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.022		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		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: 500-121121-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121121-3	1314V3-01-B01 (0-6)	Solid	12/06/16 08:55	12/07/16 13:30
500-121121-4	1314V3-01-B01 (6-11)	Solid	12/06/16 09:00	12/07/16 13:30
500-121121-7	1314V3-01-B02 (0-8)	Solid	12/06/16 10:55	12/07/16 13:30
500-121121-11	1314V3-01-B05 (0-6)	Solid	12/06/16 12:40	12/07/16 13:30
500-121121-12	1314V3-01-B05 (6-12)	Solid	12/06/16 12:45	12/07/16 13:30
500-121121-13	1314V3-01-B06 (0-8)	Solid	12/06/16 15:00	12/07/16 13:30
500-121121-14	1314V3-01-B06 (8-15)	Solid	12/06/16 15:05	12/07/16 13:30
500-121121-15	1314V3-01-B06 (8-15)D	Solid	12/06/16 15:05	12/07/16 13:30
500-121121-16	1314V3-01-B07 (0-6)	Solid	12/06/16 15:35	12/07/16 13:30
500-121121-17	1314V3-01-B07 (6-12)	Solid	12/06/16 15:40	12/07/16 13:30
500-121121-18	1314V3-01-B08 (0-4)	Solid	12/06/16 16:15	12/07/16 13:30
500-121121-19	1314V3-01-B08 (4-9)	Solid	12/06/16 16:20	12/07/16 13:30

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (0-6)

Lab Sample ID: 500-121121-3

Date Collected: 12/06/16 08:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.062		0.022	0.0094	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Bromoform	<0.0022		0.0022	0.00063	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Bromomethane	<0.0054		0.0054	0.0020	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
2-Butanone (MEK)	0.011		0.0054	0.0024	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Chloroethane	<0.0054		0.0054	0.0016	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,1-Dichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,3-Dichloropropane, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Methylene Chloride	<0.0054		0.0054	0.0021	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Styrene	<0.0022		0.0022	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00069	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Trichloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Vinyl acetate	<0.0054		0.0054	0.0019	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1
Xylenes, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	12/07/16 18:00	12/08/16 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 120	12/07/16 18:00	12/08/16 23:00	1
Dibromofluoromethane	117		75 - 120	12/07/16 18:00	12/08/16 23:00	1
1,2-Dichloroethane-d4 (Surr)	114		69 - 134	12/07/16 18:00	12/08/16 23:00	1
Toluene-d8 (Surr)	114		75 - 123	12/07/16 18:00	12/08/16 23:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (0-6)

Lab Sample ID: 500-121121-3

Date Collected: 12/06/16 08:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Naphthalene	0.013	J	0.040	0.0061	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2-Methylnaphthalene	0.017	J	0.080	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Acenaphthylene	0.0059	J	0.040	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Fluorene	0.0084	J	0.040	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Phenanthrene	0.11		0.040	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Anthracene	0.022	J	0.040	0.0067	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Fluoranthene	0.16		0.040	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Pyrene	0.14		0.040	0.0079	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Benzo[a]anthracene	0.077		0.040	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (0-6)

Lab Sample ID: 500-121121-3

Date Collected: 12/06/16 08:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.074		0.040	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Benzo[b]fluoranthene	0.090		0.040	0.0086	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Benzo[k]fluoranthene	0.042		0.040	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Benzo[a]pyrene	0.069		0.040	0.0077	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Indeno[1,2,3-cd]pyrene	0.026	J	0.040	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
Benzo[g,h,i]perylene	0.029	J	0.040	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 05:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/14/16 07:31	12/15/16 05:53	1
Phenol-d5	81		36 - 123	12/14/16 07:31	12/15/16 05:53	1
Nitrobenzene-d5	84		33 - 124	12/14/16 07:31	12/15/16 05:53	1
2-Fluorobiphenyl	80		42 - 115	12/14/16 07:31	12/15/16 05:53	1
2,4,6-Tribromophenol	73		25 - 130	12/14/16 07:31	12/15/16 05:53	1
Terphenyl-d14	87		25 - 150	12/14/16 07:31	12/15/16 05:53	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	1.1	0.23	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Arsenic	4.2		0.56	0.26	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Barium	83		0.56	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Beryllium	0.66		0.22	0.049	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Boron	15		2.8	0.39	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Cadmium	1.9		0.11	0.033	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Calcium	41000	B	11	3.6	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Chromium	10	B	0.56	0.097	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Cobalt	5.7		0.28	0.064	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Copper	25		0.56	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Iron	18000		11	4.3	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Lead	78		0.28	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Magnesium	2300	B	5.6	2.3	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Manganese	430		0.56	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Nickel	13		0.56	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Potassium	1200		28	4.6	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Silver	0.084	J	0.28	0.066	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Sodium	380		56	7.4	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Thallium	0.96		0.56	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Vanadium	17		0.28	0.082	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1
Zinc	1100		1.1	0.36	mg/Kg	☼	12/10/16 10:01	12/12/16 02:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.95		0.50	0.050	mg/L		12/13/16 08:02	12/14/16 03:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 03:02	1
Boron	0.27	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 03:02	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (0-6)

Lab Sample ID: 500-121121-3

Date Collected: 12/06/16 08:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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		12/13/16 08:02	12/14/16 03:02	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:02	1
Cobalt	0.023	J	0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:02	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 03:02	1
Lead	0.014		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 03:02	1
Manganese	3.3		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:02	1
Nickel	0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:02	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 03:02	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:02	1
Zinc	0.23	J	0.50	0.020	mg/L		12/13/16 08:02	12/14/16 03:02	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.014		0.0075	0.0075	mg/L		12/12/16 09:10	12/14/16 06:33	1
Manganese	0.020	J	0.025	0.010	mg/L		12/12/16 09:10	12/14/16 06:33	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		12/13/16 08:02	12/13/16 18:58	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 18:58	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		12/12/16 12:00	12/13/16 12:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.019	0.010	mg/Kg	☼	12/09/16 15:45	12/12/16 10:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/09/16 20:27	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (6-11)

Lab Sample ID: 500-121121-4

Date Collected: 12/06/16 09:00

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 75.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.054		0.023	0.010	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Benzene	<0.0023		0.0023	0.00060	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Bromodichloromethane	<0.0023		0.0023	0.00048	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Bromoform	<0.0023		0.0023	0.00068	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Bromomethane	<0.0058		0.0058	0.0022	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
2-Butanone (MEK)	0.012		0.0058	0.0026	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Carbon disulfide	<0.0058		0.0058	0.0012	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Carbon tetrachloride	<0.0023		0.0023	0.00068	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Chlorobenzene	<0.0023		0.0023	0.00086	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Chloroethane	<0.0058		0.0058	0.0017	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Chloroform	<0.0023		0.0023	0.00081	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Chloromethane	<0.0058		0.0058	0.0023	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00070	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Dibromochloromethane	<0.0023		0.0023	0.00076	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,1-Dichloroethane	<0.0023		0.0023	0.00080	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,2-Dichloroethane	<0.0058		0.0058	0.0018	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,1-Dichloroethene	<0.0023		0.0023	0.00080	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,2-Dichloropropane	<0.0023		0.0023	0.00060	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,3-Dichloropropane, Total	<0.0023		0.0023	0.00082	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
2-Hexanone	<0.0058		0.0058	0.0018	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Methylene Chloride	<0.0058		0.0058	0.0023	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
4-Methyl-2-pentanone (MIBK)	<0.0058		0.0058	0.0017	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00069	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Styrene	<0.0023		0.0023	0.00071	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00075	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Tetrachloroethene	<0.0023		0.0023	0.00080	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Toluene	<0.0023		0.0023	0.00059	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00082	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,1,1-Trichloroethane	<0.0023		0.0023	0.00078	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.0010	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Trichloroethene	<0.0023		0.0023	0.00079	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Vinyl acetate	<0.0058		0.0058	0.0020	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1
Xylenes, Total	<0.0047		0.0047	0.00075	mg/Kg	☼	12/07/16 18:00	12/08/16 23:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 120	12/07/16 18:00	12/08/16 23:26	1
Dibromofluoromethane	115		75 - 120	12/07/16 18:00	12/08/16 23:26	1
1,2-Dichloroethane-d4 (Surr)	117		69 - 134	12/07/16 18:00	12/08/16 23:26	1
Toluene-d8 (Surr)	110		75 - 123	12/07/16 18:00	12/08/16 23:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.22		0.22	0.097	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.066	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
1,4-Dichlorobenzene	<0.22		0.22	0.056	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (6-11)

Lab Sample ID: 500-121121-4

Date Collected: 12/06/16 09:00

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 75.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2-Methylphenol	<0.22		0.22	0.070	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
N-Nitrosodi-n-propylamine	<0.088		0.088	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Hexachloroethane	<0.22		0.22	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2-Chlorophenol	<0.22		0.22	0.075	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Nitrobenzene	<0.044		0.044	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
1,2,4-Trichlorobenzene	<0.22		0.22	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Isophorone	<0.22		0.22	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,4-Dimethylphenol	<0.44		0.44	0.17	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Hexachlorobutadiene	<0.22		0.22	0.069	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Naphthalene	<0.044		0.044	0.0067	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,4-Dichlorophenol	<0.44		0.44	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
4-Chloroaniline	<0.88		0.88	0.21	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,4,6-Trichlorophenol	<0.44		0.44	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,4,5-Trichlorophenol	<0.44		0.44	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Hexachlorocyclopentadiene	<0.88		0.88	0.25	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2-Methylnaphthalene	<0.088		0.088	0.0081	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2-Nitroaniline	<0.22		0.22	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
4-Chloro-3-methylphenol	<0.44		0.44	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,6-Dinitrotoluene	<0.22		0.22	0.086	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2-Nitrophenol	<0.44		0.44	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
3-Nitroaniline	<0.44		0.44	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Dimethyl phthalate	<0.22		0.22	0.057	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,4-Dinitrophenol	<0.88		0.88	0.77	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Acenaphthylene	<0.044		0.044	0.0058	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
2,4-Dinitrotoluene	<0.22		0.22	0.070	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Acenaphthene	<0.044		0.044	0.0079	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
4-Nitrophenol	<0.88		0.88	0.42	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Fluorene	<0.044		0.044	0.0062	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
4-Nitroaniline	<0.44		0.44	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Hexachlorobenzene	<0.088		0.088	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Diethyl phthalate	<0.22		0.22	0.074	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Pentachlorophenol	<0.88		0.88	0.70	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
N-Nitrosodiphenylamine	<0.22		0.22	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
4,6-Dinitro-2-methylphenol	<0.88		0.88	0.35	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Phenanthrene	0.017	J	0.044	0.0061	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Anthracene	<0.044		0.044	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Di-n-butyl phthalate	<0.22		0.22	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Fluoranthene	0.016	J	0.044	0.0081	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Pyrene	0.013	J	0.044	0.0087	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Butyl benzyl phthalate	<0.22		0.22	0.083	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Benzo[a]anthracene	<0.044		0.044	0.0059	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (6-11)

Lab Sample ID: 500-121121-4

Date Collected: 12/06/16 09:00

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 75.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.044		0.044	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.080	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Di-n-octyl phthalate	<0.22		0.22	0.071	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Benzo[b]fluoranthene	<0.044		0.044	0.0095	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Benzo[k]fluoranthene	<0.044		0.044	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Benzo[a]pyrene	<0.044		0.044	0.0085	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Indeno[1,2,3-cd]pyrene	<0.044		0.044	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Dibenz(a,h)anthracene	<0.044		0.044	0.0085	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
Benzo[g,h,i]perylene	<0.044		0.044	0.014	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1
3 & 4 Methylphenol	<0.22		0.22	0.073	mg/Kg	☼	12/14/16 07:31	12/15/16 06:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		40 - 130	12/14/16 07:31	12/15/16 06:20	1
Phenol-d5	92		36 - 123	12/14/16 07:31	12/15/16 06:20	1
Nitrobenzene-d5	81		33 - 124	12/14/16 07:31	12/15/16 06:20	1
2-Fluorobiphenyl	75		42 - 115	12/14/16 07:31	12/15/16 06:20	1
2,4,6-Tribromophenol	69		25 - 130	12/14/16 07:31	12/15/16 06:20	1
Terphenyl-d14	84		25 - 150	12/14/16 07:31	12/15/16 06:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	J	1.3	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Arsenic	2.0		0.65	0.30	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Barium	49		0.65	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Beryllium	0.37		0.26	0.056	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Boron	6.8		3.2	0.45	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Cadmium	0.15		0.13	0.038	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Calcium	8400	B	13	4.2	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Chromium	8.6	B	0.65	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Cobalt	4.8		0.32	0.073	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Copper	8.7		0.65	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Iron	13000		13	5.0	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Lead	13		0.32	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Magnesium	3700	B	6.5	2.6	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Manganese	300		0.65	0.13	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Nickel	12		0.65	0.18	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Potassium	650		32	5.3	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Selenium	0.37	J	0.65	0.32	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Silver	<0.32		0.32	0.076	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Sodium	180		65	8.6	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Thallium	0.68		0.65	0.32	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Vanadium	15		0.32	0.095	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1
Zinc	48		1.3	0.41	mg/Kg	☼	12/10/16 10:01	12/12/16 02:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		12/13/16 08:02	12/14/16 03:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 03:07	1
Boron	0.22	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 03:07	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B01 (6-11)

Lab Sample ID: 500-121121-4

Date Collected: 12/06/16 09:00

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 75.0

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	-	12/13/16 08:02	12/14/16 03:07	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Cobalt	0.036		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Iron	<0.40		0.40	0.20	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Manganese	5.3		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Nickel	0.040		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Silver	<0.025		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 03:07	1
Zinc	0.15	J	0.50	0.020	mg/L	-	12/13/16 08:02	12/14/16 03:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.077		0.025	0.010	mg/L	-	12/12/16 09:10	12/14/16 06:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/13/16 08:02	12/13/16 19:02	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L	-	12/13/16 08:02	12/13/16 19:02	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/12/16 12:00	12/13/16 12:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.019	0.010	mg/Kg	☼	12/09/16 15:45	12/12/16 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU	-		12/09/16 20:30	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B02 (0-8)

Lab Sample ID: 500-121121-7

Date Collected: 12/06/16 10:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.040		0.019	0.0083	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
2-Butanone (MEK)	0.0072		0.0048	0.0021	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/07/16 18:00	12/08/16 23:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 120	12/07/16 18:00	12/08/16 23:52	1
Dibromofluoromethane	119		75 - 120	12/07/16 18:00	12/08/16 23:52	1
1,2-Dichloroethane-d4 (Surr)	126		69 - 134	12/07/16 18:00	12/08/16 23:52	1
Toluene-d8 (Surr)	107		75 - 123	12/07/16 18:00	12/08/16 23:52	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	☼	12/14/16 07:31	12/15/16 01:21	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B02 (0-8)

Lab Sample ID: 500-121121-7

Date Collected: 12/06/16 10:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Diethyl phthalate	0.22		0.20	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Phenanthrene	0.026 J		0.039	0.0055	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Fluoranthene	0.036 J		0.039	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Pyrene	0.034 J		0.039	0.0078	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Benzo[a]anthracene	0.012 J		0.039	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B02 (0-8)

Lab Sample ID: 500-121121-7

Date Collected: 12/06/16 10:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.016	J	0.039	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Benzo[a]pyrene	0.015	J	0.039	0.0076	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/14/16 07:31	12/15/16 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	95		40 - 130	12/14/16 07:31	12/15/16 01:21	1
Phenol-d5	93		36 - 123	12/14/16 07:31	12/15/16 01:21	1
Nitrobenzene-d5	79		33 - 124	12/14/16 07:31	12/15/16 01:21	1
2-Fluorobiphenyl	72		42 - 115	12/14/16 07:31	12/15/16 01:21	1
2,4,6-Tribromophenol	67		25 - 130	12/14/16 07:31	12/15/16 01:21	1
Terphenyl-d14	89		25 - 150	12/14/16 07:31	12/15/16 01:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.2	0.25	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Arsenic	4.1		0.59	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Barium	91		0.59	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Beryllium	0.56		0.24	0.051	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Boron	6.5		3.0	0.41	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Cadmium	0.24		0.12	0.034	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Calcium	29000	B	12	3.8	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Chromium	13	B	0.59	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Cobalt	5.8		0.30	0.067	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Copper	14		0.59	0.13	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Iron	15000		12	4.6	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Lead	21		0.30	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Magnesium	2400	B	5.9	2.4	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Manganese	390		0.59	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Nickel	12		0.59	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Potassium	1000		30	4.8	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Selenium	<0.59		0.59	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Silver	<0.30		0.30	0.069	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Sodium	170		59	7.8	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Thallium	0.87		0.59	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Vanadium	20		0.30	0.086	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	1
Zinc	55		1.2	0.37	mg/Kg	☼	12/10/16 10:01	12/12/16 02:56	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		12/13/16 08:02	12/14/16 03:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 03:12	1
Boron	0.14	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 03:12	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B02 (0-8)

Lab Sample ID: 500-121121-7

Date Collected: 12/06/16 10:55

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.3

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		12/13/16 08:02	12/14/16 03:12	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:12	1
Cobalt	0.017	J	0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:12	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 03:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 03:12	1
Manganese	6.2		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:12	1
Nickel	0.017	J	0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:12	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 03:12	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:12	1
Zinc	0.071	J	0.50	0.020	mg/L		12/13/16 08:02	12/14/16 03:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.27		0.025	0.010	mg/L		12/12/16 09:10	12/14/16 06:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/13/16 08:02	12/13/16 19:14	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 19:14	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		12/12/16 12:00	12/13/16 12:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.020	0.011	mg/Kg	☼	12/09/16 15:45	12/12/16 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/09/16 20:34	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (0-6)

Lab Sample ID: 500-121121-11

Date Collected: 12/06/16 12:40

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.090		0.021	0.0094	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Benzene	<0.0021		0.0021	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Bromodichloromethane	<0.0021		0.0021	0.00044	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Bromoform	<0.0021		0.0021	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Bromomethane	<0.0054		0.0054	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
2-Butanone (MEK)	0.020		0.0054	0.0024	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Carbon tetrachloride	<0.0021		0.0021	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Chlorobenzene	<0.0021		0.0021	0.00079	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Chloroethane	<0.0054		0.0054	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Chloroform	<0.0021		0.0021	0.00075	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00060	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Dibromochloromethane	<0.0021		0.0021	0.00070	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,1-Dichloroethane	<0.0021		0.0021	0.00074	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,1-Dichloroethene	<0.0021		0.0021	0.00074	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,2-Dichloropropane	<0.0021		0.0021	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00075	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Methylene Chloride	<0.0054		0.0054	0.0021	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Styrene	<0.0021		0.0021	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Tetrachloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Toluene	<0.0021		0.0021	0.00054	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00095	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00075	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00092	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Trichloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Vinyl acetate	<0.0054		0.0054	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Vinyl chloride	<0.0021		0.0021	0.00095	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1
Xylenes, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	12/07/16 18:00	12/09/16 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 120	12/07/16 18:00	12/09/16 18:02	1
Dibromofluoromethane	115		75 - 120	12/07/16 18:00	12/09/16 18:02	1
1,2-Dichloroethane-d4 (Surr)	117		69 - 134	12/07/16 18:00	12/09/16 18:02	1
Toluene-d8 (Surr)	110		75 - 123	12/07/16 18:00	12/09/16 18:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (0-6)

Lab Sample ID: 500-121121-11

Date Collected: 12/06/16 12:40

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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	☼	12/14/16 07:31	12/15/16 07:15	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Naphthalene	0.077		0.038	0.0059	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2-Methylnaphthalene	0.083		0.078	0.0071	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Acenaphthylene	0.038		0.038	0.0051	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Acenaphthene	0.086		0.038	0.0069	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Dibenzofuran	0.062 J		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Fluorene	0.11		0.038	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Phenanthrene	1.1		0.038	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Anthracene	0.28		0.038	0.0064	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Carbazole	0.12 J		0.19	0.096	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Fluoranthene	1.1		0.038	0.0071	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Pyrene	1.0		0.038	0.0077	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Benzo[a]anthracene	0.51		0.038	0.0052	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (0-6)

Lab Sample ID: 500-121121-11

Date Collected: 12/06/16 12:40

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.49		0.038	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Benzo[b]fluoranthene	0.54		0.038	0.0083	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Benzo[k]fluoranthene	0.20		0.038	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Benzo[a]pyrene	0.43		0.038	0.0075	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Indeno[1,2,3-cd]pyrene	0.14		0.038	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Dibenz(a,h)anthracene	0.043		0.038	0.0075	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
Benzo[g,h,i]perylene	0.14		0.038	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 07:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/14/16 07:31	12/15/16 07:15	1
Phenol-d5	54		36 - 123	12/14/16 07:31	12/15/16 07:15	1
Nitrobenzene-d5	94		33 - 124	12/14/16 07:31	12/15/16 07:15	1
2-Fluorobiphenyl	84		42 - 115	12/14/16 07:31	12/15/16 07:15	1
2,4,6-Tribromophenol	51		25 - 130	12/14/16 07:31	12/15/16 07:15	1
Terphenyl-d14	87		25 - 150	12/14/16 07:31	12/15/16 07:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.7		1.1	0.23	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Arsenic	8.4		0.56	0.26	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Barium	120		0.56	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Beryllium	0.55		0.22	0.048	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Boron	6.2		2.8	0.39	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Cadmium	0.49		0.11	0.032	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Calcium	7500	B	11	3.6	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Chromium	17	B	0.56	0.096	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Cobalt	8.5		0.28	0.063	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Copper	35		0.56	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Iron	33000		11	4.3	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Lead	41		0.28	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Magnesium	3700	B	5.6	2.3	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Manganese	370		0.56	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Nickel	30		0.56	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Potassium	1400		28	4.5	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Selenium	0.32	J	0.56	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Sodium	790		56	7.3	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Thallium	1.3		0.56	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Vanadium	26		0.28	0.081	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	1
Zinc	120		1.1	0.35	mg/Kg	☼	12/10/16 10:01	12/12/16 03:23	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		12/13/16 08:02	12/14/16 03:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 03:53	1
Boron	0.17	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 03:53	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (0-6)

Lab Sample ID: 500-121121-11

Date Collected: 12/06/16 12:40

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0079		0.0050	0.0020	mg/L		12/13/16 08:02	12/14/16 03:53	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:53	1
Cobalt	0.037		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:53	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 03:53	1
Lead	0.025		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 03:53	1
Manganese	8.0		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:53	1
Nickel	0.071		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:53	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 03:53	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:53	1
Zinc	0.67		0.50	0.020	mg/L		12/13/16 08:02	12/14/16 03:53	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/12/16 09:10	12/14/16 07:14	1
Lead	0.21		0.0075	0.0075	mg/L		12/12/16 09:10	12/14/16 07:14	1
Manganese	1.2		0.025	0.010	mg/L		12/12/16 09:10	12/14/16 07:14	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		12/13/16 08:02	12/13/16 19:43	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 19:43	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		12/12/16 12:00	12/13/16 12:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.020	0.011	mg/Kg	☼	12/09/16 15:45	12/12/16 11:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			12/09/16 20:48	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (6-12)

Lab Sample ID: 500-121121-12

Date Collected: 12/06/16 12:45

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.097		0.027	0.012	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Benzene	<0.0027		0.0027	0.00070	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Bromodichloromethane	<0.0027		0.0027	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Bromoform	<0.0027		0.0027	0.00080	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Bromomethane	<0.0069		0.0069	0.0026	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
2-Butanone (MEK)	0.020		0.0069	0.0030	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Carbon disulfide	<0.0069		0.0069	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Carbon tetrachloride	<0.0027		0.0027	0.00080	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Chlorobenzene	<0.0027		0.0027	0.0010	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Chloroethane	<0.0069		0.0069	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Chloroform	<0.0027		0.0027	0.00095	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Chloromethane	<0.0069		0.0069	0.0028	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
cis-1,2-Dichloroethene	<0.0027		0.0027	0.00077	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
cis-1,3-Dichloropropene	<0.0027		0.0027	0.00083	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Dibromochloromethane	<0.0027		0.0027	0.00090	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,1-Dichloroethane	<0.0027		0.0027	0.00094	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,2-Dichloroethane	<0.0069		0.0069	0.0021	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,1-Dichloroethene	<0.0027		0.0027	0.00095	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,2-Dichloropropane	<0.0027		0.0027	0.00071	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,3-Dichloropropane, Total	<0.0027		0.0027	0.00096	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Ethylbenzene	<0.0027		0.0027	0.0013	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
2-Hexanone	<0.0069		0.0069	0.0021	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Methylene Chloride	<0.0069		0.0069	0.0027	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
4-Methyl-2-pentanone (MIBK)	<0.0069		0.0069	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Methyl tert-butyl ether	<0.0027		0.0027	0.00081	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Styrene	<0.0027		0.0027	0.00083	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,1,2,2-Tetrachloroethane	<0.0027		0.0027	0.00088	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Tetrachloroethene	<0.0027		0.0027	0.00094	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Toluene	<0.0027		0.0027	0.00069	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
trans-1,2-Dichloroethene	<0.0027		0.0027	0.0012	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
trans-1,3-Dichloropropene	<0.0027		0.0027	0.00096	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,1,1-Trichloroethane	<0.0027		0.0027	0.00092	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
1,1,2-Trichloroethane	<0.0027		0.0027	0.0012	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Trichloroethene	<0.0027		0.0027	0.00093	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Vinyl acetate	<0.0069		0.0069	0.0024	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Vinyl chloride	<0.0027		0.0027	0.0012	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1
Xylenes, Total	<0.0055		0.0055	0.00088	mg/Kg	☼	12/07/16 18:00	12/09/16 18:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 120	12/07/16 18:00	12/09/16 18:28	1
Dibromofluoromethane	117		75 - 120	12/07/16 18:00	12/09/16 18:28	1
1,2-Dichloroethane-d4 (Surr)	119		69 - 134	12/07/16 18:00	12/09/16 18:28	1
Toluene-d8 (Surr)	110		75 - 123	12/07/16 18:00	12/09/16 18:28	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	☼	12/14/16 07:31	12/15/16 07:42	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (6-12)

Lab Sample ID: 500-121121-12

Date Collected: 12/06/16 12:45

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.0

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	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Naphthalene	0.042		0.040	0.0062	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2-Methylnaphthalene	0.039 J		0.081	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Acenaphthylene	0.0053 J		0.040	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Acenaphthene	0.11		0.040	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Dibenzofuran	0.080 J		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Fluorene	0.10		0.040	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Phenanthrene	1.1		0.040	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Anthracene	0.28		0.040	0.0067	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Carbazole	0.13 J		0.20	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Fluoranthene	1.0		0.040	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Pyrene	0.91		0.040	0.0080	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Benzo[a]anthracene	0.47		0.040	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (6-12)

Lab Sample ID: 500-121121-12

Date Collected: 12/06/16 12:45

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.41		0.040	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Benzo[b]fluoranthene	0.47		0.040	0.0086	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Benzo[k]fluoranthene	0.17		0.040	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Benzo[a]pyrene	0.37		0.040	0.0078	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Indeno[1,2,3-cd]pyrene	0.12		0.040	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Dibenz(a,h)anthracene	0.038	J	0.040	0.0077	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
Benzo[g,h,i]perylene	0.12		0.040	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 07:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		40 - 130	12/14/16 07:31	12/15/16 07:42	1
Phenol-d5	50		36 - 123	12/14/16 07:31	12/15/16 07:42	1
Nitrobenzene-d5	91		33 - 124	12/14/16 07:31	12/15/16 07:42	1
2-Fluorobiphenyl	82		42 - 115	12/14/16 07:31	12/15/16 07:42	1
2,4,6-Tribromophenol	50		25 - 130	12/14/16 07:31	12/15/16 07:42	1
Terphenyl-d14	84		25 - 150	12/14/16 07:31	12/15/16 07:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J	1.1	0.24	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Arsenic	3.9		0.57	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Barium	100		0.57	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Beryllium	0.57		0.23	0.050	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Boron	4.1		2.9	0.40	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Cadmium	0.26		0.11	0.033	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Calcium	9800	B	11	3.7	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Chromium	15	B	0.57	0.099	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Cobalt	6.1		0.29	0.065	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Copper	23		0.57	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Iron	20000		11	4.4	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Lead	57		0.29	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Magnesium	3300	B	5.7	2.3	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Manganese	400		0.57	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Nickel	15		0.57	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Potassium	1600		29	4.7	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Silver	0.070	J	0.29	0.067	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Sodium	450		57	7.6	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Thallium	1.0		0.57	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Vanadium	17		0.29	0.084	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	1
Zinc	110		1.1	0.36	mg/Kg	☼	12/10/16 10:01	12/12/16 03:29	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		12/13/16 08:02	12/14/16 03:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 03:58	1
Boron	0.19	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 03:58	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B05 (6-12)

Lab Sample ID: 500-121121-12

Date Collected: 12/06/16 12:45

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 81.0

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		12/13/16 08:02	12/14/16 03:58	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:58	1
Cobalt	0.023	J	0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:58	1
Iron	0.30	J	0.40	0.20	mg/L		12/13/16 08:02	12/14/16 03:58	1
Lead	0.025		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 03:58	1
Manganese	6.5		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:58	1
Nickel	0.023	J	0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:58	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 03:58	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 03:58	1
Zinc	0.51		0.50	0.020	mg/L		12/13/16 08:02	12/14/16 03:58	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.18		0.0075	0.0075	mg/L		12/12/16 09:10	12/14/16 07:24	1
Manganese	0.99		0.025	0.010	mg/L		12/12/16 09:10	12/14/16 07:24	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		12/13/16 08:02	12/13/16 19:47	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 19:47	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		12/12/16 12:00	12/13/16 13:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.47		0.020	0.010	mg/Kg	☼	12/09/16 15:45	12/12/16 11:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/09/16 20:51	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (0-8)

Lab Sample ID: 500-121121-13

Date Collected: 12/06/16 15:00

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 86.0

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	☼	12/07/16 18:00	12/09/16 18:54	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/07/16 18:00	12/09/16 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 120	12/07/16 18:00	12/09/16 18:54	1
Dibromofluoromethane	117		75 - 120	12/07/16 18:00	12/09/16 18:54	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/07/16 18:00	12/09/16 18:54	1
Toluene-d8 (Surr)	113		75 - 123	12/07/16 18:00	12/09/16 18:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (0-8)

Lab Sample ID: 500-121121-13

Date Collected: 12/06/16 15:00

Matrix: Solid

Date Received: 12/07/16 13:30

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	☼	12/14/16 07:31	12/15/16 02:43	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Naphthalene	0.012	J	0.038	0.0059	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2-Methylnaphthalene	0.021	J	0.077	0.0070	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Diethyl phthalate	0.076	J	0.19	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Phenanthrene	0.12		0.038	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Anthracene	0.022	J	0.038	0.0064	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Fluoranthene	0.18		0.038	0.0071	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Pyrene	0.15		0.038	0.0076	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Benzo[a]anthracene	0.074		0.038	0.0051	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (0-8)

Lab Sample ID: 500-121121-13

Date Collected: 12/06/16 15:00

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.076		0.038	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Benzo[b]fluoranthene	0.083		0.038	0.0083	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Benzo[k]fluoranthene	0.033 J		0.038	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Benzo[a]pyrene	0.066		0.038	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Indeno[1,2,3-cd]pyrene	0.034 J		0.038	0.0099	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Dibenz(a,h)anthracene	0.010 J		0.038	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
Benzo[g,h,i]perylene	0.038		0.038	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 02:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/14/16 07:31	12/15/16 02:43	1
Phenol-d5	62		36 - 123	12/14/16 07:31	12/15/16 02:43	1
Nitrobenzene-d5	95		33 - 124	12/14/16 07:31	12/15/16 02:43	1
2-Fluorobiphenyl	84		42 - 115	12/14/16 07:31	12/15/16 02:43	1
2,4,6-Tribromophenol	66		25 - 130	12/14/16 07:31	12/15/16 02:43	1
Terphenyl-d14	85		25 - 150	12/14/16 07:31	12/15/16 02:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28 J		1.1	0.23	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Arsenic	4.1		0.56	0.26	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Barium	77		0.56	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Beryllium	0.55		0.22	0.049	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Boron	4.9		2.8	0.39	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Cadmium	0.34		0.11	0.033	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Calcium	16000 B		11	3.6	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Chromium	12 B		0.56	0.097	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Cobalt	5.3		0.28	0.063	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Copper	14		0.56	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Iron	13000		11	4.3	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Lead	42		0.28	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Magnesium	4800 B		5.6	2.3	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Manganese	360		0.56	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Nickel	12		0.56	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Potassium	980		28	4.6	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Sodium	290		56	7.4	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Thallium	0.67		0.56	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Vanadium	17		0.28	0.082	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	1
Zinc	88		1.1	0.36	mg/Kg	☼	12/10/16 10:01	12/12/16 03:36	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		12/13/16 08:02	12/14/16 04:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 04:03	1
Boron	0.11 J B		0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:03	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (0-8)

Lab Sample ID: 500-121121-13

Date Collected: 12/06/16 15:00

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 86.0

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	-	12/13/16 08:02	12/14/16 04:03	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Cobalt	0.017	J	0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Iron	<0.40		0.40	0.20	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Lead	0.013		0.0075	0.0075	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Manganese	4.1		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Nickel	0.018	J	0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Silver	<0.025		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:03	1
Zinc	0.13	J	0.50	0.020	mg/L	-	12/13/16 08:02	12/14/16 04:03	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.054		0.0075	0.0075	mg/L	-	12/12/16 09:10	12/14/16 07:54	1
Manganese	0.34		0.025	0.010	mg/L	-	12/12/16 09:10	12/14/16 07:54	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	-	12/13/16 08:02	12/13/16 19:51	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L	-	12/13/16 08:02	12/13/16 19:51	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	-	12/12/16 12:00	12/13/16 13:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.019	0.0099	mg/Kg	☼	12/09/16 15:45	12/12/16 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		12/09/16 20:55	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)

Lab Sample ID: 500-121121-14

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.6

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	☼	12/07/16 18:00	12/09/16 19:20	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,1,1,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/07/16 18:00	12/09/16 19:20	1
Dibromofluoromethane	115		75 - 120	12/07/16 18:00	12/09/16 19:20	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/07/16 18:00	12/09/16 19:20	1
Toluene-d8 (Surr)	106		75 - 123	12/07/16 18:00	12/09/16 19:20	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	☼	12/14/16 07:31	12/15/16 03:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)

Lab Sample ID: 500-121121-14

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.6

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	☼	12/14/16 07:31	12/15/16 03:10	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Phenanthrene	0.0056	J	0.038	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)

Lab Sample ID: 500-121121-14

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.6

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	☼	12/14/16 07:31	12/15/16 03:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 03:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/14/16 07:31	12/15/16 03:10	1
Phenol-d5	69		36 - 123	12/14/16 07:31	12/15/16 03:10	1
Nitrobenzene-d5	95		33 - 124	12/14/16 07:31	12/15/16 03:10	1
2-Fluorobiphenyl	89		42 - 115	12/14/16 07:31	12/15/16 03:10	1
2,4,6-Tribromophenol	53		25 - 130	12/14/16 07:31	12/15/16 03:10	1
Terphenyl-d14	92		25 - 150	12/14/16 07:31	12/15/16 03:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J	1.2	0.24	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Arsenic	4.5		0.59	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Barium	84		0.59	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Beryllium	0.53		0.24	0.051	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Boron	2.5	J	2.9	0.41	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Cadmium	0.15		0.12	0.034	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Calcium	5800	B	12	3.8	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Chromium	15	B	0.59	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Cobalt	7.4		0.29	0.067	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Copper	12		0.59	0.13	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Iron	16000		12	4.5	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Lead	8.2		0.29	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Magnesium	3400	B	5.9	2.4	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Manganese	440		0.59	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Nickel	15		0.59	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Potassium	930		29	4.8	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Selenium	<0.59		0.59	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Silver	<0.29		0.29	0.069	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Sodium	210		59	7.8	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Thallium	0.97		0.59	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Vanadium	22		0.29	0.086	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1
Zinc	36		1.2	0.37	mg/Kg	☼	12/10/16 10:01	12/12/16 03:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.30	J	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 04:08	1
Boron	0.052	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:08	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)

Lab Sample ID: 500-121121-14

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.6

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		12/13/16 08:02	12/14/16 04:08	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:08	1
Cobalt	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:08	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 04:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 04:08	1
Manganese	0.043		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:08	1
Nickel	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:08	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 04:08	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:08	1
Zinc	0.022	J	0.50	0.020	mg/L		12/13/16 08:02	12/14/16 04:08	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		12/13/16 08:02	12/13/16 20:07	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 20:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/12/16 12:00	12/13/16 13:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.019	0.010	mg/Kg	☼	12/09/16 15:45	12/12/16 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/09/16 20:58	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)D

Lab Sample ID: 500-121121-15

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.2

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	☼	12/07/16 18:00	12/09/16 19:47	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/07/16 18:00	12/09/16 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/07/16 18:00	12/09/16 19:47	1
Dibromofluoromethane	118		75 - 120	12/07/16 18:00	12/09/16 19:47	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/07/16 18:00	12/09/16 19:47	1
Toluene-d8 (Surr)	107		75 - 123	12/07/16 18:00	12/09/16 19:47	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	☼	12/14/16 07:31	12/15/16 03:37	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)D

Lab Sample ID: 500-121121-15

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.2

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	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Phenanthrene	0.0069	J	0.040	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Fluoranthene	0.0082	J	0.040	0.0074	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)D

Lab Sample ID: 500-121121-15

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.2

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	☼	12/14/16 07:31	12/15/16 03:37	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/14/16 07:31	12/15/16 03:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/14/16 07:31	12/15/16 03:37	1
Phenol-d5	80		36 - 123	12/14/16 07:31	12/15/16 03:37	1
Nitrobenzene-d5	100		33 - 124	12/14/16 07:31	12/15/16 03:37	1
2-Fluorobiphenyl	92		42 - 115	12/14/16 07:31	12/15/16 03:37	1
2,4,6-Tribromophenol	54		25 - 130	12/14/16 07:31	12/15/16 03:37	1
Terphenyl-d14	94		25 - 150	12/14/16 07:31	12/15/16 03:37	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	☼	12/10/16 10:01	12/12/16 03:50	1
Arsenic	3.8		0.60	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Barium	82		0.60	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Beryllium	0.51		0.24	0.052	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Boron	2.2	J	3.0	0.42	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Cadmium	0.17		0.12	0.035	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Calcium	6400	B	12	3.8	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Chromium	14	B	0.60	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Cobalt	5.8		0.30	0.067	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Copper	12		0.60	0.13	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Iron	14000		12	4.6	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Lead	8.1		0.30	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Magnesium	4000	B	6.0	2.4	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Manganese	380		0.60	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Nickel	14		0.60	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Potassium	920		30	4.9	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Selenium	<0.60		0.60	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Sodium	210		60	7.9	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Thallium	0.92		0.60	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Vanadium	19		0.30	0.087	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1
Zinc	33		1.2	0.38	mg/Kg	☼	12/10/16 10:01	12/12/16 03:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.33	J	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 04:12	1
Boron	0.073	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:12	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B06 (8-15)D

Lab Sample ID: 500-121121-15

Date Collected: 12/06/16 15:05

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.2

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		12/13/16 08:02	12/14/16 04:12	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:12	1
Cobalt	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:12	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 04:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 04:12	1
Manganese	0.097		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:12	1
Nickel	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:12	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 04:12	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:12	1
Zinc	<0.50		0.50	0.020	mg/L		12/13/16 08:02	12/14/16 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		12/13/16 08:02	12/13/16 20:11	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 20:11	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		12/12/16 12:00	12/13/16 13:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.011	mg/Kg	☼	12/09/16 15:45	12/12/16 11:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/09/16 21:02	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (0-6)

Lab Sample ID: 500-121121-16

Date Collected: 12/06/16 15:35

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 88.0

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	☼	12/07/16 18:00	12/09/16 20:13	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/07/16 18:00	12/09/16 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 120	12/07/16 18:00	12/09/16 20:13	1
Dibromofluoromethane	116		75 - 120	12/07/16 18:00	12/09/16 20:13	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/07/16 18:00	12/09/16 20:13	1
Toluene-d8 (Surr)	112		75 - 123	12/07/16 18:00	12/09/16 20:13	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	☼	12/14/16 07:31	12/15/16 08:09	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (0-6)

Lab Sample ID: 500-121121-16

Date Collected: 12/06/16 15:35

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Acenaphthylene	0.0052	J	0.036	0.0048	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Phenanthrene	0.046		0.036	0.0051	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Anthracene	0.0088	J	0.036	0.0061	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Fluoranthene	0.084		0.036	0.0068	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Pyrene	0.076		0.036	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Benzo[a]anthracene	0.037		0.036	0.0049	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (0-6)

Lab Sample ID: 500-121121-16

Date Collected: 12/06/16 15:35

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.046		0.036	0.0099	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Benzo[b]fluoranthene	0.067		0.036	0.0079	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Benzo[k]fluoranthene	0.021 J		0.036	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Benzo[a]pyrene	0.041		0.036	0.0070	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
Benzo[g,h,i]perylene	0.017 J		0.036	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 08:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	107		40 - 130	12/14/16 07:31	12/15/16 08:09	1
Phenol-d5	74		36 - 123	12/14/16 07:31	12/15/16 08:09	1
Nitrobenzene-d5	99		33 - 124	12/14/16 07:31	12/15/16 08:09	1
2-Fluorobiphenyl	92		42 - 115	12/14/16 07:31	12/15/16 08:09	1
2,4,6-Tribromophenol	63		25 - 130	12/14/16 07:31	12/15/16 08:09	1
Terphenyl-d14	88		25 - 150	12/14/16 07:31	12/15/16 08:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41 J		1.1	0.23	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Arsenic	4.1		0.55	0.25	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Barium	74		0.55	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Beryllium	0.52		0.22	0.048	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Boron	4.8		2.7	0.38	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Cadmium	0.28		0.11	0.032	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Calcium	19000 B		11	3.5	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Chromium	11 B		0.55	0.094	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Cobalt	5.0		0.27	0.062	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Copper	13		0.55	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Iron	13000		11	4.2	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Lead	49		0.27	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Magnesium	5100 B		5.5	2.2	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Manganese	250		0.55	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Nickel	12		0.55	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Potassium	940		27	4.5	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Sodium	510		55	7.2	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Thallium	0.66		0.55	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Vanadium	16		0.27	0.080	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	1
Zinc	65		1.1	0.35	mg/Kg	☼	12/10/16 10:01	12/12/16 04:12	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		12/13/16 08:02	12/14/16 04:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 04:25	1
Boron	0.14 J B		0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:25	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (0-6)

Lab Sample ID: 500-121121-16

Date Collected: 12/06/16 15:35

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0030	J	0.0050	0.0020	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Cobalt	0.022	J	0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Iron	<0.40		0.40	0.20	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Lead	0.013		0.0075	0.0075	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Manganese	5.6		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Nickel	0.023	J	0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Silver	<0.025		0.025	0.010	mg/L	-	12/13/16 08:02	12/14/16 04:25	1
Zinc	0.16	J	0.50	0.020	mg/L	-	12/13/16 08:02	12/14/16 04:25	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.017		0.0075	0.0075	mg/L	-	12/12/16 09:10	12/14/16 08:15	1
Manganese	0.066		0.025	0.010	mg/L	-	12/12/16 09:10	12/14/16 08:15	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	-	12/13/16 08:02	12/13/16 20:15	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L	-	12/13/16 08:02	12/13/16 20:15	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	-	12/12/16 12:00	12/13/16 13:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.017	0.0091	mg/Kg	☼	12/09/16 15:45	12/12/16 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU	-		12/09/16 21:05	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (6-12)

Lab Sample ID: 500-121121-17

Date Collected: 12/06/16 15:40

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.4

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	☼	12/07/16 18:00	12/09/16 20:39	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/07/16 18:00	12/09/16 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/07/16 18:00	12/09/16 20:39	1
Dibromofluoromethane	116		75 - 120	12/07/16 18:00	12/09/16 20:39	1
1,2-Dichloroethane-d4 (Surr)	118		69 - 134	12/07/16 18:00	12/09/16 20:39	1
Toluene-d8 (Surr)	108		75 - 123	12/07/16 18:00	12/09/16 20:39	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	☼	12/14/16 07:31	12/15/16 04:04	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (6-12)

Lab Sample ID: 500-121121-17

Date Collected: 12/06/16 15:40

Matrix: Solid

Date Received: 12/07/16 13:30

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	☼	12/14/16 07:31	12/15/16 04:04	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (6-12)

Lab Sample ID: 500-121121-17

Date Collected: 12/06/16 15:40

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 04:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	114		40 - 130	12/14/16 07:31	12/15/16 04:04	1
Phenol-d5	90		36 - 123	12/14/16 07:31	12/15/16 04:04	1
Nitrobenzene-d5	105		33 - 124	12/14/16 07:31	12/15/16 04:04	1
2-Fluorobiphenyl	97		42 - 115	12/14/16 07:31	12/15/16 04:04	1
2,4,6-Tribromophenol	25		25 - 130	12/14/16 07:31	12/15/16 04:04	1
Terphenyl-d14	98		25 - 150	12/14/16 07:31	12/15/16 04:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.2	0.24	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Arsenic	2.9		0.58	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Barium	82		0.58	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Beryllium	0.46		0.23	0.050	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Boron	2.4	J	2.9	0.41	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Cadmium	0.17		0.12	0.034	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Calcium	3200	B	12	3.7	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Chromium	13	B	0.58	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Cobalt	5.1		0.29	0.066	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Copper	10		0.58	0.13	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Iron	13000		12	4.5	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Lead	7.2		0.29	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Magnesium	2300	B	5.8	2.4	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Manganese	350		0.58	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Nickel	13		0.58	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Potassium	870		29	4.8	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Selenium	<0.58		0.58	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Sodium	130		58	7.7	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Thallium	0.80		0.58	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Vanadium	16		0.29	0.085	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1
Zinc	32		1.2	0.37	mg/Kg	☼	12/10/16 10:01	12/12/16 04:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.19	J	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 04:30	1
Boron	0.060	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:30	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B07 (6-12)

Lab Sample ID: 500-121121-17

Date Collected: 12/06/16 15:40

Matrix: Solid

Date Received: 12/07/16 13:30

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		12/13/16 08:02	12/14/16 04:30	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:30	1
Cobalt	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:30	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 04:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 04:30	1
Manganese	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:30	1
Nickel	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:30	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 04:30	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:30	1
Zinc	<0.50		0.50	0.020	mg/L		12/13/16 08:02	12/14/16 04:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/13/16 08:02	12/13/16 20:19	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 20:19	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		12/12/16 12:00	12/13/16 13:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J	0.019	0.0099	mg/Kg	☼	12/09/16 15:45	12/12/16 11:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/09/16 21:09	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (0-4)

Lab Sample ID: 500-121121-18

Date Collected: 12/06/16 16:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	12/07/16 18:00	12/09/16 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/07/16 18:00	12/09/16 21:05	1
Dibromofluoromethane	117		75 - 120	12/07/16 18:00	12/09/16 21:05	1
1,2-Dichloroethane-d4 (Surr)	125		69 - 134	12/07/16 18:00	12/09/16 21:05	1
Toluene-d8 (Surr)	107		75 - 123	12/07/16 18:00	12/09/16 21:05	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	☼	12/14/16 07:31	12/15/16 04:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (0-4)

Lab Sample ID: 500-121121-18

Date Collected: 12/06/16 16:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Phenanthrene	0.032	J	0.040	0.0057	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Fluoranthene	0.057		0.040	0.0075	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Pyrene	0.053		0.040	0.0081	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Benzo[a]anthracene	0.023	J	0.040	0.0055	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (0-4)

Lab Sample ID: 500-121121-18

Date Collected: 12/06/16 16:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.034	J	0.040	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Benzo[b]fluoranthene	0.038	J	0.040	0.0088	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Benzo[k]fluoranthene	0.015	J	0.040	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Benzo[a]pyrene	0.026	J	0.040	0.0079	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Indeno[1,2,3-cd]pyrene	0.016	J	0.040	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
Benzo[g,h,i]perylene	0.017	J	0.040	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 04:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		40 - 130	12/14/16 07:31	12/15/16 04:31	1
Phenol-d5	86		36 - 123	12/14/16 07:31	12/15/16 04:31	1
Nitrobenzene-d5	95		33 - 124	12/14/16 07:31	12/15/16 04:31	1
2-Fluorobiphenyl	86		42 - 115	12/14/16 07:31	12/15/16 04:31	1
2,4,6-Tribromophenol	55		25 - 130	12/14/16 07:31	12/15/16 04:31	1
Terphenyl-d14	90		25 - 150	12/14/16 07:31	12/15/16 04:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	1.2	0.25	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Arsenic	3.7		0.59	0.27	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Barium	100		0.59	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Beryllium	0.48		0.24	0.051	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Boron	3.0		3.0	0.41	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Cadmium	0.22		0.12	0.034	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Calcium	7400	B	12	3.8	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Chromium	12	B	0.59	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Cobalt	5.5		0.30	0.067	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Copper	11		0.59	0.13	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Iron	12000		12	4.6	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Lead	48		0.30	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Magnesium	1900	B	5.9	2.4	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Manganese	490		0.59	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Nickel	11		0.59	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Potassium	880		30	4.8	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Selenium	0.35	J	0.59	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Silver	<0.30		0.30	0.069	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Sodium	310		59	7.8	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Thallium	0.91		0.59	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Vanadium	16		0.30	0.087	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	1
Zinc	41		1.2	0.38	mg/Kg	☼	12/10/16 10:01	12/12/16 04:26	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		12/13/16 08:02	12/14/16 04:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 04:35	1
Boron	0.12	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:35	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (0-4)

Lab Sample ID: 500-121121-18

Date Collected: 12/06/16 16:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 80.5

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		12/13/16 08:02	12/14/16 04:35	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:35	1
Cobalt	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:35	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 04:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 04:35	1
Manganese	1.1		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:35	1
Nickel	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:35	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 04:35	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:35	1
Zinc	0.030	J	0.50	0.020	mg/L		12/13/16 08:02	12/14/16 04:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.29		0.025	0.010	mg/L		12/12/16 09:10	12/14/16 08:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/13/16 08:02	12/13/16 20:23	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 20:23	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		12/12/16 12:00	12/13/16 13:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.019	0.010	mg/Kg	☼	12/09/16 15:45	12/12/16 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/09/16 21:16	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (4-9)

Lab Sample ID: 500-121121-19

Date Collected: 12/06/16 16:20

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Bromodichloromethane	<0.0018		0.0018	0.00038	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00052	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/07/16 18:00	12/09/16 21:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/07/16 18:00	12/09/16 21:31	1
Dibromofluoromethane	117		75 - 120	12/07/16 18:00	12/09/16 21:31	1
1,2-Dichloroethane-d4 (Surr)	115		69 - 134	12/07/16 18:00	12/09/16 21:31	1
Toluene-d8 (Surr)	106		75 - 123	12/07/16 18:00	12/09/16 21:31	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	☼	12/14/16 07:31	12/15/16 04:59	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (4-9)

Lab Sample ID: 500-121121-19

Date Collected: 12/06/16 16:20

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (4-9)

Lab Sample ID: 500-121121-19

Date Collected: 12/06/16 16:20

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.8

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	☼	12/14/16 07:31	12/15/16 04:59	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/14/16 07:31	12/15/16 04:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/14/16 07:31	12/15/16 04:59	1
Phenol-d5	90		36 - 123	12/14/16 07:31	12/15/16 04:59	1
Nitrobenzene-d5	95		33 - 124	12/14/16 07:31	12/15/16 04:59	1
2-Fluorobiphenyl	90		42 - 115	12/14/16 07:31	12/15/16 04:59	1
2,4,6-Tribromophenol	48		25 - 130	12/14/16 07:31	12/15/16 04:59	1
Terphenyl-d14	92		25 - 150	12/14/16 07:31	12/15/16 04:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	1.1	0.24	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Arsenic	6.3		0.57	0.26	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Barium	76		0.57	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Beryllium	0.49		0.23	0.049	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Boron	1.7	J	2.9	0.40	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Cadmium	0.31		0.11	0.033	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Calcium	2500	B	11	3.7	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Chromium	13	B	0.57	0.098	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Cobalt	6.9		0.29	0.064	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Copper	11		0.57	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Iron	15000		11	4.4	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Lead	7.4		0.29	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Magnesium	2100	B	5.7	2.3	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Manganese	770		0.57	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Nickel	19		0.57	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Potassium	660		29	4.7	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Sodium	180		57	7.5	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Thallium	1.4		0.57	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Vanadium	22		0.29	0.083	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1
Zinc	31		1.1	0.36	mg/Kg	☼	12/10/16 10:01	12/12/16 04:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.23	J	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 04:40	1
Boron	0.050	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 04:40	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-2

Client Sample ID: 1314V3-01-B08 (4-9)

Lab Sample ID: 500-121121-19

Date Collected: 12/06/16 16:20

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.8

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		12/13/16 08:02	12/14/16 04:40	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:40	1
Cobalt	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:40	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 04:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 04:40	1
Manganese	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:40	1
Nickel	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:40	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 04:40	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 04:40	1
Zinc	<0.50		0.50	0.020	mg/L		12/13/16 08:02	12/14/16 04:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/13/16 08:02	12/13/16 20:27	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 20:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/12/16 12:00	12/13/16 13:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.011	mg/Kg	☼	12/09/16 15:45	12/12/16 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/09/16 21:19	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121121-2

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
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.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
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: 500-121121-2

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		Water	1,3-Dichloropropene, Total
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

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

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

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

Chain of Custody Record

Lab Job #: 500-121121

Chain of Custody Number: E846-22

Page _____ of _____

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter					Comments		
Project Name		Lab Project #		Sampler		Matrix							
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Voc	Svoc	TOPI TAC	TAC Metals	TwP/SPR	TAC Metals	PH/0.1% Solids
EE		1009008-0046-01											
IIM		50012744		S. Cooper		D-Wright							
Rock Island County, IL													
3		1314V3-01-B01 (0-6)	12-6-16	0855	2 S		X	X	X	X	X		64608
4		1314V3-01-B01 (6-11)	12-6-16	0900	2 S		X	X	X	X	X		
5		1314V3-01-C01	12-6-16	0915	6 W		X	X	X				
6		1314V3-00-TB01	-	-	2 W		X						
7		1314V3-01-B02 (0-8)	12-6-16	1055	2 S		X	X	X	X	X		
8		1314V3-01-B03 (0-8)	12-6-16	1140	2 S		X	X	X	X	X		
9		1314V3-01-B04 (0-6)	12-6-16	1210	2 S		X	X	X	X	X		
10		1314V3-01-B04 (6-112)	12-6-16	1215	2 S		X	X	X	X	X		
11		1314V3-01-B05 (0-6)	12-6-16	1240	2 S		X	X	X	X	X		
12		1314V3-01-B05 (6-12)	12-6-16	1245	2 S		X	X	X	X	X		

- 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

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>[Signature]</i>	JTE	12-6-16	1730	<i>[Signature]</i>	TA-CHI	12/7/16	1730
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:

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 Address: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

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

Chain of Custody Record

Lab Job #: 500-121121
 Chain of Custody Number: 15846-24
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments			
EE		1409006-0846-01								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			
ITT		50012477		12-6-16		1500		2		S			
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix			
Rock Island County, IL		50012477		12-6-16		1505		2		S			
Sample		Lab PM		Date		Time		# of Containers		Matrix			
S-Comp		D. Wray		12-6-16		1535		2		S			
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOL	S VOL	TOTAL TAC	INABLE	TEMP/SPUR TAC	PH/6/6 S.I.C.	Comments
13		1314V3-01-B06 (0-8)	12-6-16	1500	2	S	+	+	+	+	+		64C08
14		1314V3-01-B06 (0-15)	12-6-16	1505	2	S	+	+	+	+	+		
15		1314V3-01-B06 (0-15) D	12-6-16	1505	2	S	+	+	+	+	+		
16		1314V3-01-B07 (6-6)	12-6-16	1535	2	S	+	+	+	+	+		
17		1314V3-01-B07 (6-12)	12-6-16	1540	2	S	+	+	+	+	+		
18		1314V3-01-B08 (0-4)	12-6-16	1615	2	S	+	+	+	+	+		
19		1314V3-01-B08 (4-9)	12-6-16	1620	2	S	+	+	+	+	+		
2 12-6-16													

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	Date	Time	Received By	Company	Date	Time	Lab Courier
[Signature]	EE	12-6-16	1715	[Signature]	QA-CH	12/7/16	1330	
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped
								FedEx
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: 500-121121-2

Login Number: 121121

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	3.3,4.5
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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121163-1
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:
12/22/2016 2:52:34 PM

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

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.

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Case Narrative

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

TestAmerica Job ID: 500-121163-1

Job ID: 500-121163-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-121163-1

Comments

No additional comments.

Receipt

The samples were received on 12/8/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 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

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 365567 had 1 analyte outside control limits: 4-Nitroaniline. These results have been reported and qualified. (LCS 500-365567/2-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 500-364421 and 500-364618 contained Lead above the reporting limit (RL). The samples 1314V3-01-B10 (0-6) (500-121163-1), 1314V3-06-B10 (0-6) (500-121163-2), 1314V3-06-B10 (6-11) (500-121163-3), 1314V3-06-B11 (0-6) (500-121163-4), 1314V3-06-B11 (6-10.7) (500-121163-5), 1314V3-07-B01 (0-6) (500-121163-8), 1314V3-07-B02 (0-5) (500-121163-10), 1314V3-07-B04 (0-5) (500-121163-12) and 1314V3-07-B04 (5-11) (500-121163-13) associated with this LB did not contain the target compound; therefore, re-extraction and/or re-analysis of the samples were not performed.

Method(s) 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-364837, at line 160, recovered above the upper control limit for Thallium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 6020A: The CCB at lines 155 and 159 had results greater than the reporting limit(RL) of 2 ppb for TI. The samples associated with these CCB were had results below the RL and therefore were 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: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.026	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.063		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.068		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.043		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.046		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.073		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.026	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.057		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.035	J	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.010	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.044		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.0		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	54		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.9		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	24		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	560		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	350		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.80		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.41		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.40		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038		0.017	0.0091	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: 500-121163-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121163-1	1314V3-01-B10 (0-6)	Solid	12/07/16 08:40	12/08/16 09:00

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Client Sample Results

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

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.025		0.025	0.011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Benzene	<0.0025		0.0025	0.00063	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Bromodichloromethane	<0.0025		0.0025	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Bromoform	<0.0025		0.0025	0.00072	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Bromomethane	<0.0061		0.0061	0.0023	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
2-Butanone (MEK)	<0.0061		0.0061	0.0027	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Carbon disulfide	<0.0061		0.0061	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Carbon tetrachloride	<0.0025		0.0025	0.00071	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chlorobenzene	<0.0025		0.0025	0.00091	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chloroethane	<0.0061		0.0061	0.0018	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chloroform	<0.0025		0.0025	0.00085	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chloromethane	<0.0061		0.0061	0.0025	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00069	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00074	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Dibromochloromethane	<0.0025		0.0025	0.00080	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1-Dichloroethane	<0.0025		0.0025	0.00084	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,2-Dichloroethane	<0.0061		0.0061	0.0019	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1-Dichloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,2-Dichloropropane	<0.0025		0.0025	0.00063	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,3-Dichloropropane, Total	<0.0025		0.0025	0.00086	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
2-Hexanone	<0.0061		0.0061	0.0019	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Methylene Chloride	<0.0061		0.0061	0.0024	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
4-Methyl-2-pentanone (MIBK)	<0.0061		0.0061	0.0018	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00072	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Styrene	<0.0025		0.0025	0.00074	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00078	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Tetrachloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Toluene	<0.0025		0.0025	0.00062	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00086	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1,1-Trichloroethane	<0.0025		0.0025	0.00082	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Trichloroethene	<0.0025		0.0025	0.00083	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Vinyl acetate	<0.0061		0.0061	0.0021	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Xylenes, Total	<0.0049		0.0049	0.00079	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/08/16 13:05	12/09/16 15:11	1
Dibromofluoromethane	107		75 - 120	12/08/16 13:05	12/09/16 15:11	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/08/16 13:05	12/09/16 15:11	1
Toluene-d8 (Surr)	104		75 - 123	12/08/16 13:05	12/09/16 15:11	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	☼	12/16/16 18:31	12/20/16 13:21	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

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	0.044	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Nitroaniline	<0.36 *		0.36	0.15	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Phenanthrene	0.026	J	0.036	0.0051	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Fluoranthene	0.063		0.036	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Pyrene	0.068		0.036	0.0073	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[a]anthracene	0.043		0.036	0.0049	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.046		0.036	0.010	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[b]fluoranthene	0.073		0.036	0.0079	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[k]fluoranthene	0.026	J	0.036	0.011	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[a]pyrene	0.057		0.036	0.0071	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Indeno[1,2,3-cd]pyrene	0.035	J	0.036	0.0095	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Dibenz(a,h)anthracene	0.010	J	0.036	0.0071	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[g,h,i]perylene	0.044		0.036	0.012	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/16/16 18:31	12/20/16 13:21	1
Phenol-d5	99		36 - 123	12/16/16 18:31	12/20/16 13:21	1
Nitrobenzene-d5	96		33 - 124	12/16/16 18:31	12/20/16 13:21	1
2-Fluorobiphenyl	93		42 - 115	12/16/16 18:31	12/20/16 13:21	1
2,4,6-Tribromophenol	90		25 - 130	12/16/16 18:31	12/20/16 13:21	1
Terphenyl-d14	109		25 - 150	12/16/16 18:31	12/20/16 13:21	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	☼	12/10/16 10:04	12/10/16 18:51	1
Arsenic	4.0		0.57	0.26	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Barium	54		0.57	0.10	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Beryllium	0.54		0.23	0.049	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Boron	1.7	J	2.9	0.40	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Cadmium	0.24		0.11	0.033	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Calcium	23000		11	3.7	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Chromium	12	B	0.57	0.098	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Cobalt	6.9		0.29	0.065	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Copper	12		0.57	0.12	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Iron	12000		11	4.4	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Lead	24		0.29	0.14	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Magnesium	13000		5.7	2.3	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Manganese	280		0.57	0.11	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Nickel	24		0.57	0.15	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Potassium	560		29	4.7	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Sodium	350		57	7.5	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Vanadium	18		0.29	0.083	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Zinc	52		1.1	0.36	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80		0.50	0.050	mg/L		12/12/16 09:08	12/13/16 17:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/12/16 09:08	12/13/16 17:36	1
Boron	0.055	J	0.50	0.050	mg/L		12/12/16 09:08	12/13/16 17:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

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		12/12/16 09:08	12/13/16 17:36	1
Chromium	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Cobalt	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Iron	<0.40		0.40	0.20	mg/L		12/12/16 09:08	12/13/16 17:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/12/16 09:08	12/13/16 17:36	1
Manganese	0.41		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Nickel	0.026		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Selenium	<0.050		0.050	0.020	mg/L		12/12/16 09:08	12/13/16 17:36	1
Silver	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Zinc	<0.50		0.50	0.020	mg/L		12/12/16 09:08	12/13/16 17:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.40		0.025	0.010	mg/L		12/12/16 09:04	12/15/16 14:03	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		12/12/16 09:08	12/12/16 21:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/12/16 09:08	12/12/16 21:21	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		12/12/16 12:00	12/13/16 10:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.017	0.0091	mg/Kg	☼	12/09/16 15:45	12/12/16 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			12/12/16 13:05	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121163-1

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 500-121163-1

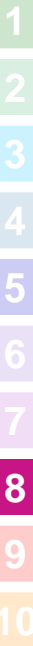
Laboratory: TestAmerica Chicago

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 604
Phone: 708.534.5200 Fax: 708.534.



500-121163 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 #: 500-121163
Chain of Custody Number: E84685
Page _____ of _____
Temperature °C of Cooler: 4.1

Client		Client Project #		Preservative							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		Parameter							Comments			
Project Location/State		Lab Project #										
Sampler		Lab RM										
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers	Matrix					
		Date	Time									
1		131403-01-1310(0-6)	12-7-16 0840	2	S	X	X	X	X	X		64C08
12-7-16												

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>EE</u>	Date: <u>12/7/16</u>	Time: <u>12:00</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CPE</u>	Date: <u>12/8/16</u>	Time: <u>0900</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 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: 500-121163-1

Login Number: 121163

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
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	



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: 500-121504-2
Client Project/Site: IDOT - I-74 - WO 046

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

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Authorized for release by:
12/29/2016 12:51:38 PM

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

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Case Narrative

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

TestAmerica Job ID: 500-121504-2

Job ID: 500-121504-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121504-2

Comments

No additional comments.

Receipt

The samples were received on 12/15/2016 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 3.1° C and 5.0° 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. (500-121504-E-1-T MS) and (500-121504-E-1-U 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 interference check standard solution (ICSA) associated with batch 500-366456 had results for Cadmium above the control limit. The laboratory blank (MB), laboratory control sample (LCS), and all other QC were within control limits. The associated samples had results below the reporting limit (RL) for Cadmium, therefore the data have been reported.

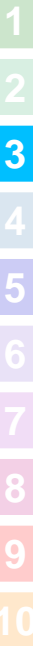
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

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

Organic Prep

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



Detection Summary

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (0-6)

Lab Sample ID: 500-121504-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.011	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.012	J	0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.014	J	0.035	0.0071	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.46	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.6		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.22	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	3.5		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	36000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	8.5		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	340	B	0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	790		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.76		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	530		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.91		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.80		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0034	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	7.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.020	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.19		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		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-B09 (6-11.6)

Lab Sample ID: 500-121504-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.065		0.037	0.0057	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.10		0.074	0.0068	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.013	J	0.037	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0091	J	0.037	0.0066	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.045	J	0.18	0.043	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0097	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.031	J	0.037	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.15		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.16		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.069		0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.090		0.037	0.010	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: 500-121504-2

Client Sample ID: 1314V3-01-B09 (6-11.6) (Continued)

Lab Sample ID: 500-121504-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.10		0.037	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.037		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.061		0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.027	J	0.037	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.036	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.44	J	0.93	0.19	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.6		0.46	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	55		0.46	0.085	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.19	0.040	mg/Kg	1	☼	6010B	Total/NA
Boron	8.6		2.3	0.32	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35		0.093	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000	B	9.3	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.46	0.080	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.23	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	9.3	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.23	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		4.6	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	290	B	0.46	0.092	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.46	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	780		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54		0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		46	6.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.89		0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.23	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	66		0.93	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	0.99		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.14	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0046	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.0080		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	8.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.19	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.028		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.32		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.036		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		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: 500-121504-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121504-9	1314V3-01-B09 (0-6)	Solid	12/14/16 11:15	12/15/16 10:00
500-121504-10	1314V3-01-B09 (6-11.6)	Solid	12/14/16 11:25	12/15/16 10:00

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Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (0-6)

Lab Sample ID: 500-121504-9

Date Collected: 12/14/16 11:15

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.6

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	☼	12/15/16 16:33	12/21/16 16:35	1
Benzene	<0.0015		0.0015	0.00040	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Bromodichloromethane	<0.0015		0.0015	0.00032	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00069	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Vinyl acetate	<0.0039		0.0039	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Vinyl chloride	<0.0015		0.0015	0.00069	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/15/16 16:33	12/21/16 16:35	1
Dibromofluoromethane	116		75 - 120	12/15/16 16:33	12/21/16 16:35	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/15/16 16:33	12/21/16 16:35	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/21/16 16:35	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	☼	12/23/16 07:12	12/27/16 21:21	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (0-6)

Lab Sample ID: 500-121504-9

Date Collected: 12/14/16 11:15

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.6

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	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Phenanthrene	0.011	J	0.035	0.0050	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Fluoranthene	0.012	J	0.035	0.0066	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Pyrene	0.014	J	0.035	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Benzo[a]anthracene	<0.035		0.035	0.0048	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (0-6)

Lab Sample ID: 500-121504-9

Date Collected: 12/14/16 11:15

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.6

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	☼	12/23/16 07:12	12/27/16 21:21	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Benzo[b]fluoranthene	<0.035		0.035	0.0077	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Benzo[k]fluoranthene	<0.035		0.035	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Benzo[a]pyrene	<0.035		0.035	0.0069	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 21:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/23/16 07:12	12/27/16 21:21	1
Phenol-d5	74		36 - 123	12/23/16 07:12	12/27/16 21:21	1
Nitrobenzene-d5	89		33 - 124	12/23/16 07:12	12/27/16 21:21	1
2-Fluorobiphenyl	84		42 - 115	12/23/16 07:12	12/27/16 21:21	1
2,4,6-Tribromophenol	25		25 - 130	12/23/16 07:12	12/27/16 21:21	1
Terphenyl-d14	87		25 - 150	12/23/16 07:12	12/27/16 21:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.1	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Arsenic	4.6		0.56	0.26	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Barium	35		0.56	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Beryllium	0.44		0.22	0.049	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Boron	3.5		2.8	0.39	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Cadmium	0.11		0.11	0.032	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Calcium	36000	B	11	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Chromium	10	B	0.56	0.096	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Cobalt	5.3		0.28	0.063	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Copper	11		0.56	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Iron	15000	B	11	4.3	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Lead	8.5		0.28	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Magnesium	19000		5.6	2.3	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Manganese	340	B	0.56	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Nickel	13		0.56	0.15	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Potassium	790		28	4.6	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Selenium	0.76		0.56	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Sodium	530		56	7.4	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Thallium	0.91		0.56	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Vanadium	18		0.28	0.082	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1
Zinc	34		1.1	0.35	mg/Kg	☼	12/22/16 08:28	12/23/16 20:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:15	1
Boron	0.068	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:15	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (0-6)

Lab Sample ID: 500-121504-9

Date Collected: 12/14/16 11:15

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.6

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	-	12/22/16 08:57	12/22/16 19:15	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Cobalt	0.023	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Manganese	7.0		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Nickel	0.032		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:15	1
Zinc	0.020	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.19		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 00:46	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	-	12/22/16 08:57	12/22/16 16:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:30	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	-	12/22/16 14:30	12/23/16 10:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.018	0.0093	mg/Kg	☼	12/20/16 13:30	12/21/16 11:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/22/16 15:48	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (6-11.6)

Lab Sample ID: 500-121504-10

Date Collected: 12/14/16 11:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/15/16 16:33	12/21/16 17:01	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/21/16 17:01	1
1,2-Dichloroethane-d4 (Surr)	122		69 - 134	12/15/16 16:33	12/21/16 17:01	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/21/16 17:01	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	☼	12/23/16 07:12	12/27/16 21:49	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (6-11.6)

Lab Sample ID: 500-121504-10

Date Collected: 12/14/16 11:25

Matrix: Solid

Date Received: 12/15/16 10:00

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	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Naphthalene	0.065		0.037	0.0057	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2-Methylnaphthalene	0.10		0.074	0.0068	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Acenaphthylene	0.013 J		0.037	0.0048	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Acenaphthene	0.0091 J		0.037	0.0066	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Dibenzofuran	0.045 J		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Fluorene	0.0097 J		0.037	0.0052	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Phenanthrene	0.17		0.037	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Anthracene	0.031 J		0.037	0.0061	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Fluoranthene	0.15		0.037	0.0068	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Pyrene	0.16		0.037	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Benzo[a]anthracene	0.069		0.037	0.0049	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (6-11.6)

Lab Sample ID: 500-121504-10

Date Collected: 12/14/16 11:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.090		0.037	0.010	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Benzo[b]fluoranthene	0.10		0.037	0.0079	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Benzo[k]fluoranthene	0.037		0.037	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Benzo[a]pyrene	0.061		0.037	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Indeno[1,2,3-cd]pyrene	0.027 J		0.037	0.0095	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
Benzo[g,h,i]perylene	0.036 J		0.037	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/23/16 07:12	12/27/16 21:49	1
Phenol-d5	58		36 - 123	12/23/16 07:12	12/27/16 21:49	1
Nitrobenzene-d5	95		33 - 124	12/23/16 07:12	12/27/16 21:49	1
2-Fluorobiphenyl	85		42 - 115	12/23/16 07:12	12/27/16 21:49	1
2,4,6-Tribromophenol	38		25 - 130	12/23/16 07:12	12/27/16 21:49	1
Terphenyl-d14	86		25 - 150	12/23/16 07:12	12/27/16 21:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44 J		0.93	0.19	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Arsenic	4.6		0.46	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Barium	55		0.46	0.085	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Beryllium	0.56		0.19	0.040	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Boron	8.6		2.3	0.32	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Cadmium	0.35		0.093	0.027	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Calcium	26000 B		9.3	3.0	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Chromium	12 B		0.46	0.080	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Cobalt	5.3		0.23	0.052	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Copper	15		0.46	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Iron	14000 B		9.3	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Lead	14		0.23	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Magnesium	13000		4.6	1.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Manganese	290 B		0.46	0.092	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Nickel	13		0.46	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Potassium	780		23	3.8	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Selenium	0.54		0.46	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Silver	<0.23		0.23	0.054	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Sodium	200		46	6.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Thallium	0.89		0.46	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Vanadium	18		0.23	0.068	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1
Zinc	66		0.93	0.29	mg/Kg	☼	12/22/16 08:28	12/23/16 21:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.99		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:22	1
Boron	0.14 J B		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-2

Client Sample ID: 1314V3-01-B09 (6-11.6)

Lab Sample ID: 500-121504-10

Date Collected: 12/14/16 11:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0046	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Cobalt	0.021	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Lead	0.0080		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Manganese	8.0		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Nickel	0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:22	1
Zinc	0.19	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:22	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.028		0.0075	0.0075	mg/L	-	12/23/16 07:45	12/28/16 00:53	1
Manganese	0.32		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 00:53	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	-	12/22/16 08:57	12/22/16 16:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:34	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	-	12/22/16 14:30	12/23/16 10:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.018	0.0096	mg/Kg	☼	12/20/16 13:30	12/21/16 11:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		12/22/16 15:52	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121504-2

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
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.
^	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: 500-121504-2

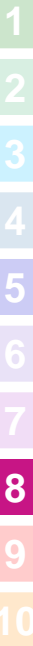
Laboratory: TestAmerica Chicago

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 #: 500-121504
 Chain of Custody Number: ES46-3E
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter												Preservative Key		
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM												
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix													Comments	
			Date	Time																
9		1314V3-01-B09 (6-6)	12-14-16	1115	2 S	S	X	X	X	X	X	X	X	X	X	X	X	X	X	64008
10		1314V3-01-B09 (6-11.6)	12-14-16	1125	2 S	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
3 12-14-16																				

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: <u>[Signature]</u> Company: <u>EE</u> Date: <u>12-14-16</u> Time: <u>1730</u>	Received By: <u>[Signature]</u> Company: <u>TA-CARE</u> Date: <u>12/15/16</u> Time: <u>1000</u>	Lab Courier: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Shipped: <u>Fed-X</u>
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 - Silt
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-121504-2

Login Number: 121504

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	5.0,3.1
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	



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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121504-3
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:
12/29/2016 12:52:21 PM

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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Case Narrative

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

TestAmerica Job ID: 500-121504-3

Job ID: 500-121504-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121504-3

Comments

No additional comments.

Receipt

The samples were received on 12/15/2016 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 3.1° C and 5.0° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for 3655926 recovered outside control limits for the following analytes: Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121504-E-1-T MS) and (500-121504-E-1-U 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 interference check standard solution (ICSA) associated with batch 500-366456 had results for Cadmium above the control limit. The laboratory blank (MB), laboratory control sample (LCS), and all other QC were within control limits. The associated samples had results below the reporting limit (RL) for Cadmium, therefore the data have been reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.13		0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.21		0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.19		0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.041		0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.17	J	0.18	0.043	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.099		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	1.6		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.46		0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.19		0.18	0.091	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.9		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	1.6		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.91		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.82		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.94		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.43		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.72		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.24		0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.077		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.25		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.54	J	0.89	0.18	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.6		0.44	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	63		0.44	0.081	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.18	0.038	mg/Kg	1	☼	6010B	Total/NA
Boron	7.1		2.2	0.31	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.42		0.089	0.026	mg/Kg	1	☼	6010B	Total/NA
Calcium	28000	B	8.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.44	0.076	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.7		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.44	0.096	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	8.9	3.4	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.22	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000		4.4	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	280	B	0.44	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.44	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	850		22	3.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45		0.44	0.22	mg/Kg	1	☼	6010B	Total/NA
Sodium	560		44	5.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.44	0.22	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.22	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	86		0.89	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0042	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.16	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.34		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.045		0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		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: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.17		0.037	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.23		0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.020	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0072	J	0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.076	J	0.19	0.044	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0089	J	0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.22		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.030	J	0.037	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.18		0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.17		0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.090		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.12		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.14		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.057		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.084		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.036	J	0.037	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.012	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.043		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.62	J	0.96	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.48	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	76		0.48	0.088	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.19	0.042	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.4	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.32		0.096	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000	B	9.6	3.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.48	0.083	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.6		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	9.6	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	39		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4300		4.8	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	220	B	0.48	0.095	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	790		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.93		0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	270		48	6.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.24	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		0.96	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.83		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0079		0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.84		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.015		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	9.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.047		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.35	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.030		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.14		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: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12) (Continued)

Lab Sample ID: 500-121504-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.19		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.0091	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.0072	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.27	J	0.92	0.19	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.5		0.46	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	49		0.46	0.085	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.18	0.040	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	2.3	0.32	mg/Kg	1	☼	6010B	Total/NA
Calcium	3300	B	9.2	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.46	0.079	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.5		0.23	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	8.1		0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	9.2	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	6.6		0.23	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		4.6	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	210	B	0.46	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.3		0.46	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	580		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	110		46	6.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.70		0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.23	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	24		0.92	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	1.3		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	14		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.062	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.014	J	0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.039		0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.059	J	0.073	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.012	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.089		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.019	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.088		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.086		0.036	0.0072	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: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6) (Continued)

Lab Sample ID: 500-121504-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	0.047		0.036	0.0049	mg/Kg	1	*	☼	8270D	Total/NA
Chrysene	0.056		0.036	0.0099	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.085		0.036	0.0079	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.030	J	0.036	0.011	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[a]pyrene	0.052		0.036	0.0070	mg/Kg	1	*	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.036	0.0094	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.036	0.012	mg/Kg	1	*	☼	8270D	Total/NA
Antimony	0.33	J	1.0	0.21	mg/Kg	1	*	☼	6010B	Total/NA
Arsenic	4.5		0.51	0.23	mg/Kg	1	*	☼	6010B	Total/NA
Barium	52		0.51	0.093	mg/Kg	1	*	☼	6010B	Total/NA
Beryllium	0.50		0.20	0.044	mg/Kg	1	*	☼	6010B	Total/NA
Boron	4.6		2.5	0.35	mg/Kg	1	*	☼	6010B	Total/NA
Cadmium	0.20		0.10	0.029	mg/Kg	1	*	☼	6010B	Total/NA
Calcium	80000	B	100	33	mg/Kg	10	*	☼	6010B	Total/NA
Chromium	11	B	0.51	0.087	mg/Kg	1	*	☼	6010B	Total/NA
Cobalt	5.4		0.25	0.057	mg/Kg	1	*	☼	6010B	Total/NA
Copper	15		0.51	0.11	mg/Kg	1	*	☼	6010B	Total/NA
Iron	13000	B	10	3.9	mg/Kg	1	*	☼	6010B	Total/NA
Lead	19		0.25	0.13	mg/Kg	1	*	☼	6010B	Total/NA
Magnesium	19000		5.1	2.1	mg/Kg	1	*	☼	6010B	Total/NA
Manganese	370	B	0.51	0.10	mg/Kg	1	*	☼	6010B	Total/NA
Nickel	13		0.51	0.14	mg/Kg	1	*	☼	6010B	Total/NA
Potassium	930		25	4.1	mg/Kg	1	*	☼	6010B	Total/NA
Selenium	0.34	J	0.51	0.25	mg/Kg	1	*	☼	6010B	Total/NA
Sodium	340		51	6.7	mg/Kg	1	*	☼	6010B	Total/NA
Thallium	0.89		0.51	0.25	mg/Kg	1	*	☼	6010B	Total/NA
Vanadium	19		0.25	0.074	mg/Kg	1	*	☼	6010B	Total/NA
Zinc	51		1.0	0.32	mg/Kg	1	*	☼	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.074	J B	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0030	J ^	0.0050	0.0020	mg/L	1			6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.36		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.039		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: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.011	J	0.037	0.0057	mg/Kg	1	*	☼	8270D	Total/NA
2-Methylnaphthalene	0.019	J	0.074	0.0068	mg/Kg	1	*	☼	8270D	Total/NA
Acenaphthylene	0.0090	J	0.037	0.0049	mg/Kg	1	*	☼	8270D	Total/NA
Phenanthrene	0.069		0.037	0.0051	mg/Kg	1	*	☼	8270D	Total/NA
Anthracene	0.016	J	0.037	0.0062	mg/Kg	1	*	☼	8270D	Total/NA
Fluoranthene	0.068		0.037	0.0068	mg/Kg	1	*	☼	8270D	Total/NA
Pyrene	0.074		0.037	0.0073	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[a]anthracene	0.037		0.037	0.0050	mg/Kg	1	*	☼	8270D	Total/NA
Chrysene	0.048		0.037	0.010	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: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12) (Continued)

Lab Sample ID: 500-121504-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.061		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.019	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.034	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.018	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.39	J	1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.2		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	52		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	6.2		2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.57	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.6		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	760		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	710		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.76		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	78		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.81		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0047	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	6.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.096	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.72		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		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: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0068	J	0.036	0.0055	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0081	J	0.072	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0060	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.055		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.012	J	0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.064		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.068		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.025	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.032	J	0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.037		0.036	0.0078	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: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18) (Continued)

Lab Sample ID: 500-121504-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]pyrene	0.026	J	0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA	
Indeno[1,2,3-cd]pyrene	0.010	J	0.036	0.0093	mg/Kg	1	☼	8270D	Total/NA	
Benzo[g,h,i]perylene	0.012	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA	
Antimony	0.31	J	0.95	0.20	mg/Kg	1	☼	6010B	Total/NA	
Arsenic	6.0		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA	
Barium	39		0.47	0.087	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.39		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA	
Boron	2.8		2.4	0.33	mg/Kg	1	☼	6010B	Total/NA	
Cadmium	0.13		0.095	0.027	mg/Kg	1	☼	6010B	Total/NA	
Calcium	35000	B	9.5	3.0	mg/Kg	1	☼	6010B	Total/NA	
Chromium	9.7	B	0.47	0.081	mg/Kg	1	☼	6010B	Total/NA	
Cobalt	5.7		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA	
Copper	11		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA	
Iron	13000	B	9.5	3.6	mg/Kg	1	☼	6010B	Total/NA	
Lead	9.5		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA	
Magnesium	18000		4.7	1.9	mg/Kg	1	☼	6010B	Total/NA	
Manganese	290	B	0.47	0.094	mg/Kg	1	☼	6010B	Total/NA	
Nickel	13		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA	
Potassium	760		24	3.9	mg/Kg	1	☼	6010B	Total/NA	
Selenium	0.62		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA	
Sodium	460		47	6.2	mg/Kg	1	☼	6010B	Total/NA	
Thallium	0.86		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA	
Vanadium	16		0.24	0.069	mg/Kg	1	☼	6010B	Total/NA	
Zinc	33		0.95	0.30	mg/Kg	1	☼	6010B	Total/NA	
Barium	1.0		0.50	0.050	mg/L	1		6010B	TCLP	
Boron	0.063	J B	0.50	0.050	mg/L	1		6010B	TCLP	
Cadmium	0.0038	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP	
Cobalt	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP	
Manganese	7.8		0.025	0.010	mg/L	1		6010B	TCLP	
Nickel	0.032		0.025	0.010	mg/L	1		6010B	TCLP	
Zinc	0.021	J	0.50	0.020	mg/L	1		6010B	TCLP	
Manganese	0.23		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	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: 500-121504-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121504-11	1314V3-18-B06 (0-6)	Solid	12/14/16 11:55	12/15/16 10:00
500-121504-12	1314V3-18-B06 (6-12)	Solid	12/14/16 12:05	12/15/16 10:00
500-121504-13	1314V3-18-B06 (12-17)	Solid	12/14/16 12:10	12/15/16 10:00
500-121504-14	1314V3-18-B01 (0-6)	Solid	12/14/16 12:40	12/15/16 10:00
500-121504-15	1314V3-18-B01 (6-12)	Solid	12/14/16 12:50	12/15/16 10:00
500-121504-16	1314V3-18-B01 (12-18)	Solid	12/14/16 13:00	12/15/16 10:00



Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

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	0.0070	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Carbon tetrachloride	<0.0016 *		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 120	12/15/16 16:33	12/20/16 20:12	1
Dibromofluoromethane	120		75 - 120	12/15/16 16:33	12/20/16 20:12	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/15/16 16:33	12/20/16 20:12	1
Toluene-d8 (Surr)	118		75 - 123	12/15/16 16:33	12/20/16 20:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Naphthalene	0.13		0.036	0.0056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Methylnaphthalene	0.21		0.074	0.0067	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Acenaphthylene	0.19		0.036	0.0048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Acenaphthene	0.041		0.036	0.0066	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Dibenzofuran	0.17 J		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Fluorene	0.099		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Phenanthrene	1.6		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Anthracene	0.46		0.036	0.0061	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Carbazole	0.19		0.18	0.091	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Fluoranthene	1.9		0.036	0.0068	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Pyrene	1.6		0.036	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[a]anthracene	0.91		0.036	0.0049	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.82		0.036	0.010	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[b]fluoranthene	0.94		0.036	0.0079	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[k]fluoranthene	0.43		0.036	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[a]pyrene	0.72		0.036	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Indeno[1,2,3-cd]pyrene	0.24		0.036	0.0095	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Dibenz(a,h)anthracene	0.077		0.036	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[g,h,i]perylene	0.25		0.036	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		40 - 130	12/23/16 07:12	12/27/16 22:16	1
Phenol-d5	105		36 - 123	12/23/16 07:12	12/27/16 22:16	1
Nitrobenzene-d5	98		33 - 124	12/23/16 07:12	12/27/16 22:16	1
2-Fluorobiphenyl	87		42 - 115	12/23/16 07:12	12/27/16 22:16	1
2,4,6-Tribromophenol	43		25 - 130	12/23/16 07:12	12/27/16 22:16	1
Terphenyl-d14	91		25 - 150	12/23/16 07:12	12/27/16 22:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	0.89	0.18	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Arsenic	5.6		0.44	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Barium	63		0.44	0.081	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Beryllium	0.55		0.18	0.038	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Boron	7.1		2.2	0.31	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Cadmium	0.42		0.089	0.026	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Calcium	28000	B	8.9	2.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Chromium	12	B	0.44	0.076	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Cobalt	4.7		0.22	0.050	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Copper	17		0.44	0.096	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Iron	13000	B	8.9	3.4	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Lead	23		0.22	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Magnesium	14000		4.4	1.8	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Manganese	280	B	0.44	0.088	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Nickel	12		0.44	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Potassium	850		22	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Selenium	0.45		0.44	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Silver	<0.22		0.22	0.052	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Sodium	560		44	5.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Thallium	1.0		0.44	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Vanadium	20		0.22	0.065	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Zinc	86		0.89	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:29	1
Boron	0.095	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:29	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0042	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Manganese	1.4		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Nickel	0.010	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Zinc	0.16	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.34		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 00:59	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	-	12/22/16 08:57	12/22/16 16:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:37	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	-	12/22/16 14:30	12/23/16 10:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.018	0.0097	mg/Kg	☼	12/20/16 13:30	12/21/16 11:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/22/16 16:42	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0063	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Carbon tetrachloride	<0.0015 *		0.0015	0.00042	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Vinyl chloride	<0.0015		0.0015	0.00064	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/15/16 16:33	12/20/16 20:38	1
Dibromofluoromethane	119		75 - 120	12/15/16 16:33	12/20/16 20:38	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/15/16 16:33	12/20/16 20:38	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/20/16 20:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1

TestAmerica Chicago

Client Sample Results

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TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

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	☼	12/23/16 07:12	12/27/16 22:44	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Naphthalene	0.17		0.037	0.0058	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Methylnaphthalene	0.23		0.076	0.0069	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Acenaphthylene	0.020 J		0.037	0.0050	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Acenaphthene	0.0072 J		0.037	0.0068	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Dibenzofuran	0.076 J		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Fluorene	0.0089 J		0.037	0.0053	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Phenanthrene	0.22		0.037	0.0052	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Anthracene	0.030 J		0.037	0.0063	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Fluoranthene	0.18		0.037	0.0070	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Pyrene	0.17		0.037	0.0075	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[a]anthracene	0.090		0.037	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.12		0.037	0.010	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[b]fluoranthene	0.14		0.037	0.0081	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[k]fluoranthene	0.057		0.037	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[a]pyrene	0.084		0.037	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Indeno[1,2,3-cd]pyrene	0.036	J	0.037	0.0098	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Dibenz(a,h)anthracene	0.012	J	0.037	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[g,h,i]perylene	0.043		0.037	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/23/16 07:12	12/27/16 22:44	1
Phenol-d5	93		36 - 123	12/23/16 07:12	12/27/16 22:44	1
Nitrobenzene-d5	96		33 - 124	12/23/16 07:12	12/27/16 22:44	1
2-Fluorobiphenyl	85		42 - 115	12/23/16 07:12	12/27/16 22:44	1
2,4,6-Tribromophenol	55		25 - 130	12/23/16 07:12	12/27/16 22:44	1
Terphenyl-d14	88		25 - 150	12/23/16 07:12	12/27/16 22:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	J	0.96	0.20	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Arsenic	7.3		0.48	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Barium	76		0.48	0.088	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Beryllium	0.68		0.19	0.042	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Boron	14		2.4	0.34	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Cadmium	0.32		0.096	0.028	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Calcium	14000	B	9.6	3.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Chromium	11	B	0.48	0.083	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Cobalt	5.6		0.24	0.054	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Copper	19		0.48	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Iron	20000	B	9.6	3.7	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Lead	39		0.24	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Magnesium	4300		4.8	2.0	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Manganese	220	B	0.48	0.095	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Nickel	13		0.48	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Potassium	790		24	3.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Selenium	0.93		0.48	0.24	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Silver	<0.24		0.24	0.056	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Sodium	270		48	6.4	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Thallium	1.0		0.48	0.24	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Vanadium	19		0.24	0.070	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Zinc	120		0.96	0.31	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.83		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:36	1
Boron	0.13	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0079		0.0050	0.0020	mg/L	-	12/22/16 08:57	12/23/16 12:49	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Cobalt	0.048		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Iron	0.84		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Lead	0.015		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Manganese	9.1		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Nickel	0.047		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Zinc	0.35	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:36	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	12/23/16 07:45	12/28/16 01:06	1
Lead	0.030		0.0075	0.0075	mg/L	-	12/23/16 07:45	12/28/16 01:06	1
Manganese	0.14		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 01:06	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	-	12/22/16 08:57	12/22/16 16:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:41	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	-	12/22/16 14:30	12/23/16 10:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.019	0.0099	mg/Kg	☼	12/20/16 13:30	12/21/16 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		12/22/16 16:49	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.021		0.017	0.0076	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Carbon tetrachloride	<0.0017 *		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/15/16 16:33	12/20/16 21:04	1
Dibromofluoromethane	116		75 - 120	12/15/16 16:33	12/20/16 21:04	1
1,2-Dichloroethane-d4 (Surr)	117		69 - 134	12/15/16 16:33	12/20/16 21:04	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/20/16 21:04	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	☼	12/23/16 07:12	12/27/16 23:11	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Methylnaphthalene	0.0091	J	0.080	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Phenanthrene	0.0072	J	0.039	0.0055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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	☼	12/23/16 07:12	12/27/16 23:11	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	105		40 - 130	12/23/16 07:12	12/27/16 23:11	1
Phenol-d5	77		36 - 123	12/23/16 07:12	12/27/16 23:11	1
Nitrobenzene-d5	93		33 - 124	12/23/16 07:12	12/27/16 23:11	1
2-Fluorobiphenyl	88		42 - 115	12/23/16 07:12	12/27/16 23:11	1
2,4,6-Tribromophenol	47		25 - 130	12/23/16 07:12	12/27/16 23:11	1
Terphenyl-d14	93		25 - 150	12/23/16 07:12	12/27/16 23:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	0.92	0.19	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Arsenic	2.5		0.46	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Barium	49		0.46	0.085	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Beryllium	0.41		0.18	0.040	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Boron	2.0	J	2.3	0.32	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Cadmium	<0.092		0.092	0.027	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Calcium	3300	B	9.2	3.0	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Chromium	10	B	0.46	0.079	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Cobalt	4.5		0.23	0.052	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Copper	8.1		0.46	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Iron	10000	B	9.2	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Lead	6.6		0.23	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Magnesium	1800		4.6	1.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Manganese	210	B	0.46	0.091	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Nickel	9.3		0.46	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Potassium	580		23	3.8	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Selenium	0.37	J	0.46	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Silver	<0.23		0.23	0.054	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Sodium	110		46	6.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Thallium	0.70		0.46	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Vanadium	16		0.23	0.067	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Zinc	24		0.92	0.29	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.3		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:42	1
Boron	0.13	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0023	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Cobalt	0.032		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Manganese	14		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Nickel	0.041		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Zinc	0.062	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 01:13	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	-	12/22/16 08:57	12/22/16 16:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:44	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	-	12/22/16 14:30	12/23/16 10:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.019	0.0099	mg/Kg	☼	12/20/16 13:30	12/21/16 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		12/22/16 16:53	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Carbon tetrachloride	<0.0016 *		0.0016	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/15/16 16:33	12/20/16 21:30	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/20/16 21:30	1
1,2-Dichloroethane-d4 (Surr)	130		69 - 134	12/15/16 16:33	12/20/16 21:30	1
Toluene-d8 (Surr)	109		75 - 123	12/15/16 16:33	12/20/16 21:30	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	☼	12/23/16 07:12	12/27/16 23:38	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

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	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Naphthalene	0.039		0.036	0.0056	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Methylnaphthalene	0.059 J		0.073	0.0067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Acenaphthylene	0.012 J		0.036	0.0048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Phenanthrene	0.089		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Anthracene	0.019 J		0.036	0.0061	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Fluoranthene	0.088		0.036	0.0067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Pyrene	0.086		0.036	0.0072	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[a]anthracene	0.047		0.036	0.0049	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.056		0.036	0.0099	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[b]fluoranthene	0.085		0.036	0.0079	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[k]fluoranthene	0.030 J		0.036	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[a]pyrene	0.052		0.036	0.0070	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Indeno[1,2,3-cd]pyrene	0.021 J		0.036	0.0094	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[g,h,i]perylene	0.025 J		0.036	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		40 - 130	12/23/16 07:12	12/27/16 23:38	1
Phenol-d5	99		36 - 123	12/23/16 07:12	12/27/16 23:38	1
Nitrobenzene-d5	103		33 - 124	12/23/16 07:12	12/27/16 23:38	1
2-Fluorobiphenyl	92		42 - 115	12/23/16 07:12	12/27/16 23:38	1
2,4,6-Tribromophenol	53		25 - 130	12/23/16 07:12	12/27/16 23:38	1
Terphenyl-d14	92		25 - 150	12/23/16 07:12	12/27/16 23:38	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33 J		1.0	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Arsenic	4.5		0.51	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Barium	52		0.51	0.093	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Beryllium	0.50		0.20	0.044	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Boron	4.6		2.5	0.35	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Cadmium	0.20		0.10	0.029	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Calcium	80000 B		100	33	mg/Kg	☼	12/22/16 08:28	12/27/16 20:42	10
Chromium	11 B		0.51	0.087	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Cobalt	5.4		0.25	0.057	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Copper	15		0.51	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Iron	13000 B		10	3.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Lead	19		0.25	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Magnesium	19000		5.1	2.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Manganese	370 B		0.51	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Nickel	13		0.51	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Potassium	930		25	4.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Selenium	0.34 J		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Sodium	340		51	6.7	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Thallium	0.89		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Vanadium	19		0.25	0.074	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Zinc	51		1.0	0.32	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	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		12/22/16 08:57	12/22/16 19:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:49	1
Boron	0.074 J B		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0030	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Manganese	1.5		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Nickel	0.013	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Zinc	0.076	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:49	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	-	12/23/16 07:45	12/28/16 01:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 08:57	12/22/16 16:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:48	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	-	12/22/16 14:30	12/23/16 10:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.017	0.0091	mg/Kg	☼	12/20/16 13:30	12/21/16 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU	-		12/22/16 16:57	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Carbon tetrachloride	<0.0016 *		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/15/16 16:33	12/20/16 21:56	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/20/16 21:56	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/15/16 16:33	12/20/16 21:56	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/20/16 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Naphthalene	0.011	J	0.037	0.0057	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Methylnaphthalene	0.019	J	0.074	0.0068	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Acenaphthylene	0.0090	J	0.037	0.0049	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachlorobenzene	<0.074		0.074	0.0086	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Phenanthrene	0.069		0.037	0.0051	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Anthracene	0.016	J	0.037	0.0062	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Fluoranthene	0.068		0.037	0.0068	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Pyrene	0.074		0.037	0.0073	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[a]anthracene	0.037		0.037	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.048		0.037	0.010	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[b]fluoranthene	0.061		0.037	0.0080	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[k]fluoranthene	0.019 J		0.037	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[a]pyrene	0.034 J		0.037	0.0071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Indeno[1,2,3-cd]pyrene	0.015 J		0.037	0.0096	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[g,h,i]perylene	0.018 J		0.037	0.012	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	116		40 - 130	12/23/16 07:12	12/28/16 00:06	1
Phenol-d5	102		36 - 123	12/23/16 07:12	12/28/16 00:06	1
Nitrobenzene-d5	102		33 - 124	12/23/16 07:12	12/28/16 00:06	1
2-Fluorobiphenyl	90		42 - 115	12/23/16 07:12	12/28/16 00:06	1
2,4,6-Tribromophenol	46		25 - 130	12/23/16 07:12	12/28/16 00:06	1
Terphenyl-d14	92		25 - 150	12/23/16 07:12	12/28/16 00:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39 J		1.1	0.24	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Arsenic	6.2		0.57	0.26	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Barium	52		0.57	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Beryllium	0.46		0.23	0.049	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Boron	6.2		2.8	0.40	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Cadmium	0.20		0.11	0.033	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Calcium	54000 B		11	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Chromium	10 B		0.57	0.097	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Cobalt	4.6		0.28	0.064	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Copper	15		0.57	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Iron	13000 B		11	4.4	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Lead	17		0.28	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Magnesium	18000		5.7	2.3	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Manganese	320 B		0.57	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Nickel	11		0.57	0.15	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Potassium	760		28	4.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Selenium	0.37 J		0.57	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Sodium	710		57	7.5	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Thallium	0.76		0.57	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Vanadium	18		0.28	0.083	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Zinc	78		1.1	0.36	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	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		12/22/16 08:57	12/22/16 19:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:56	1
Boron	0.098 J B		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:56	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0047	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Cobalt	0.032		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Manganese	6.3		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Nickel	0.041		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Zinc	0.096	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:56	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	-	12/23/16 07:45	12/28/16 01:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 08:57	12/22/16 16:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:51	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	-	12/22/16 14:30	12/23/16 10:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.010	mg/Kg	☼	12/20/16 13:30	12/21/16 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU	-		12/22/16 17:01	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/15/16 16:33	12/21/16 17:28	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/21/16 17:28	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/15/16 16:33	12/21/16 17:28	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/21/16 17:28	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	☼	12/23/16 07:12	12/28/16 00:33	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Naphthalene	0.0068	J	0.036	0.0055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Methylnaphthalene	0.0081	J	0.072	0.0066	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Fluorene	0.0060	J	0.036	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Pentachlorophenol	<0.72		0.72	0.58	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Phenanthrene	0.055		0.036	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Anthracene	0.012	J	0.036	0.0060	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Fluoranthene	0.064		0.036	0.0067	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Pyrene	0.068		0.036	0.0071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[a]anthracene	0.025	J	0.036	0.0048	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.032	J	0.036	0.0098	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[b]fluoranthene	0.037		0.036	0.0078	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[a]pyrene	0.026	J	0.036	0.0070	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Indeno[1,2,3-cd]pyrene	0.010	J	0.036	0.0093	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[g,h,i]perylene	0.012	J	0.036	0.012	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	115		40 - 130	12/23/16 07:12	12/28/16 00:33	1
Phenol-d5	105		36 - 123	12/23/16 07:12	12/28/16 00:33	1
Nitrobenzene-d5	103		33 - 124	12/23/16 07:12	12/28/16 00:33	1
2-Fluorobiphenyl	94		42 - 115	12/23/16 07:12	12/28/16 00:33	1
2,4,6-Tribromophenol	50		25 - 130	12/23/16 07:12	12/28/16 00:33	1
Terphenyl-d14	94		25 - 150	12/23/16 07:12	12/28/16 00:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	0.95	0.20	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Arsenic	6.0		0.47	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Barium	39		0.47	0.087	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Beryllium	0.39		0.19	0.041	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Boron	2.8		2.4	0.33	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Cadmium	0.13		0.095	0.027	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Calcium	35000	B	9.5	3.0	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Chromium	9.7	B	0.47	0.081	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Cobalt	5.7		0.24	0.053	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Copper	11		0.47	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Iron	13000	B	9.5	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Lead	9.5		0.24	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Magnesium	18000		4.7	1.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Manganese	290	B	0.47	0.094	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Nickel	13		0.47	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Potassium	760		24	3.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Selenium	0.62		0.47	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Silver	<0.24		0.24	0.055	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Sodium	460		47	6.2	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Thallium	0.86		0.47	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Vanadium	16		0.24	0.069	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Zinc	33		0.95	0.30	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	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		12/22/16 08:57	12/22/16 20:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 20:03	1
Boron	0.063	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:03	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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	-	12/22/16 08:57	12/22/16 20:03	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Cobalt	0.024	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Manganese	7.8		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Nickel	0.032		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Zinc	0.021	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.23		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 01:33	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	-	12/22/16 08:57	12/22/16 16:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:54	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	-	12/22/16 14:30	12/23/16 10:40	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	☼	12/20/16 13:30	12/21/16 11:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		12/22/16 17:04	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121504-3

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
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.
^	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: 500-121504-3

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 #: 500-121504

Chain of Custody Number: EB46-39

Page _____ of _____

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments			
EE		1009008-0046-01											
Project Name		Lab Project #											
I 74		40012744											
Project Location/State		Lab Project #											
Rock Island County, IL		40012744											
Sampler		Lab PM											
S-Couper		D. Wright											
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Vol	S Vol	Total Tax	Washis	TCU/SP/TA/TA	PT/40 Solid	Comments
			Date	Time									
11		1314V3-18-B06 (0-6)	12-14-16	1155	2	S	X	X	X	X	X		64608
12		1314V3-18-B06 (6-12)	12-14-16	1205	2	S	X	X	X	X	X		
13		1314V3-18-B06 (12-17)	12-14-16	1210	2	S	X	X	X	X	X		
14		1314V3-18-B01 (0-6)	12-14-16	1240	2	S	X	X	X	X	X		
15		1314V3-18-B01 (6-12)	12-14-16	1250	2	S	X	X	X	X	X		
16		1314V3-18-B01 (12-18)	12-14-16	1300	2	S	X	X	X	X	X		
17		1314V3-18-B05 (0-8)	12-14-16	1335	2	S	X	X	X	X	X		
18		1314V3-18-B05 (8-12)	12-14-16	1345	2	S	X	X	X	X	X		
19		1314V3-18-B03 (0-6)	12-14-16	1425	2	S	X	X	X	X	X		
20		1314V3-18-B03 (6-12)	12-14-16	1430	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

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>[Signature]</i>	EE	12-14-16	1130	<i>[Signature]</i>	TA-CPT	12/15/16	1000
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____

Shipped: Fed-X

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: 500-121504-3

Login Number: 121504

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	5.0,3.1
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	





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):

1 Kone Court (ISGS #1314V3-5)

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: 41.51236 Longitude: -90.51156
(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: 1610455068 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: 41.51236 Longitude: -90.51156

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 1314V3-05-B01 and -B02 were sampled within the construction zone adjacent to ISGS #1314V3-5 (Industrial Building). Refer to PSI Report for ISGS #1314V3-5 (Industrial Building) including Table 4-4, and Figures 4-1, 4-2, 4-6, 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 package J121303-1.

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.

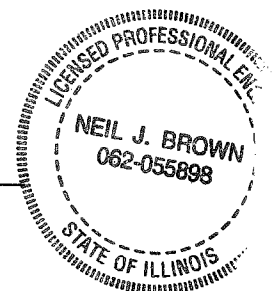
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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
 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

3/17/17
 Date:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-5 (Industrial Building)			Comparison Criteria					
	BORING	1314V3-05-B01	1314V3-05-B02	MACs			TACO		
SAMPLE	1314V3-05-B01 (0-5)	1314V3-05-B02 (0-6)	1314V3-05-B02 (6-10.6)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-5	0-6	6-10.6						
pH	8.1	8.2	7						
VOCs (None Detected)									
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.0058 J	ND U	--	--	--	--	--	--
Anthracene	ND U	0.01 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.024 J	0.042	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.024 J	0.041	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.036	0.058	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.016 J	0.032 J	ND UJ	--	--	--	--	--	--
Benzo(k)fluoranthene	0.015 J	0.018 J	ND U	9	--	--	9	1,700	--
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.03 J	0.047	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND UJ	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.053	0.084	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	0.013 J	0.024 J	ND UJ	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.026 J	0.053	ND U	--	--	--	--	--	--
Pyrene	0.045	0.086	ND U	2300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	0.3 J	0.28 J	ND U	5	--	--	31	82	--
Arsenic	5.6	4.4	9.5	11.3	13	--	13	61	--
Barium	64	81 J	110	1,500	--	--	5,500	14,000	--
Beryllium	0.54	0.46	0.5	22	--	--	160	410	--
Boron	2 J	4.6 J	2.7 J	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	5.2	--	--	78	200	--
Calcium	30,000	27,000 J	4,300	--	--	--	--	--	--
Chromium	11	11	14	21	--	--	230	690	--
Cobalt	9.9	7.9 J	9.1	20	--	--	4,700	12,000	--
Copper	11	12	13	2,900	--	--	2,900	8,200	--
Iron	19,000 †m	12,000	19,000 †m	15,000	15,900	--	--	--	--
Lead	13	23 J	9.8	107	--	--	400	700	--
Magnesium	14,000	11,000 J	3,200	325,000	--	--	--	730,000	--
Manganese	640 †m	430 J	160	630	636	--	1,600	4,100	--
Mercury	0.013 J	0.065	0.044	0.89	--	--	10	0.1	--
Nickel	20	15	20	100	--	--	1,600	4,100	--
Potassium	550	980 J	910	--	--	--	--	--	--
Sodium	83	120	140	--	--	--	--	--	--
Vanadium	21	17	26	550	--	--	550	1,400	--
Zinc	43	67 J	70	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.67	0.45 J	0.67	--	--	--	--	--	2
Boron	ND U	0.12 J	0.074 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	--	--	--	--	--	0.005
Iron	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	3 L	0.99 L	1.4 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	0.019 J	--	--	--	--	--	0.1
Zinc	ND U	0.076 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)									
Lead	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	ND U	0.21 L	0.52 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: 500-121303-1
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:
12/27/2016 1:13:32 PM

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.

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Case Narrative

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

TestAmerica Job ID: 500-121303-1

Job ID: 500-121303-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121303-1

Comments

No additional comments.

Receipt

The samples were received on 12/10/2016 7:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° 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. (500-121303-E-2-I MS) and (500-121303-E-2-J MSD)

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 500-366006 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-366006/2-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 500-365093 and 500-365312 contained Lead above the reporting limit (RL). The samples 1314V3-05-B02 (0-6) (500-121303-1), 1314V3-05-B02 (6-10.6) (500-121303-2), 1314V3-05-B01 (0-5) (500-121303-4) and (500-121303-E-13-F) 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: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.0058	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.053		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.010	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.084		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.086		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.042		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.047		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.058		0.038	0.0083	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	0.041		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.024	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.032	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J F1	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.4		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	81	F1	0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	4.6	F1	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30	B	0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	27000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		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	12000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	430		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	980	F1	28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J B F1	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	67	F1	1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.99		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.065		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.5		0.61	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	110		0.61	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7	J	3.0	0.43	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.093	J B	0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	4300	B	12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.61	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: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6) (Continued)

Lab Sample ID: 500-121303-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	9.1		0.30	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.61	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	4.7	mg/Kg	1	☼	6010B	Total/NA
Lead	9.8		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3200		6.1	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	160		0.61	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	910		30	5.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		61	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.30	0.089	mg/Kg	1	☼	6010B	Total/NA
Zinc	70		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.52		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.044		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.0		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: 500-121303-1



Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.026	J	0.036	0.0050	mg/Kg	1	*	*	8270D	Total/NA
Fluoranthene	0.053		0.036	0.0067	mg/Kg	1	*	*	8270D	Total/NA
Pyrene	0.045		0.036	0.0072	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]anthracene	0.024	J	0.036	0.0049	mg/Kg	1	*	*	8270D	Total/NA
Chrysene	0.030	J	0.036	0.0099	mg/Kg	1	*	*	8270D	Total/NA
Benzo[b]fluoranthene	0.036		0.036	0.0078	mg/Kg	1	*	*	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.036	0.011	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.036	0.0070	mg/Kg	1	*	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.013	J	0.036	0.0094	mg/Kg	1	*	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.036	0.012	mg/Kg	1	*	*	8270D	Total/NA
Antimony	0.30	J	1.1	0.22	mg/Kg	1	*	*	6010B	Total/NA
Arsenic	5.6		0.54	0.25	mg/Kg	1	*	*	6010B	Total/NA
Barium	64		0.54	0.099	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.54		0.22	0.047	mg/Kg	1	*	*	6010B	Total/NA
Boron	2.0	J	2.7	0.38	mg/Kg	1	*	*	6010B	Total/NA
Cadmium	0.13	B	0.11	0.031	mg/Kg	1	*	*	6010B	Total/NA
Calcium	30000	B	11	3.5	mg/Kg	1	*	*	6010B	Total/NA
Chromium	11		0.54	0.093	mg/Kg	1	*	*	6010B	Total/NA
Cobalt	9.9		0.27	0.061	mg/Kg	1	*	*	6010B	Total/NA
Copper	11		0.54	0.12	mg/Kg	1	*	*	6010B	Total/NA
Iron	19000	B	11	4.2	mg/Kg	1	*	*	6010B	Total/NA
Lead	13		0.27	0.13	mg/Kg	1	*	*	6010B	Total/NA
Magnesium	14000		5.4	2.2	mg/Kg	1	*	*	6010B	Total/NA
Manganese	640		0.54	0.11	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: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5) (Continued)

Lab Sample ID: 500-121303-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	20		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	550		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.28	J B	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	83		54	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.27	0.079	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	3.0		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.013	J	0.018	0.0092	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		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: 500-121303-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121303-1	1314V3-05-B02 (0-6)	Solid	12/09/16 08:25	12/10/16 07:15
500-121303-2	1314V3-05-B02 (6-10.6)	Solid	12/09/16 08:30	12/10/16 07:15
500-121303-4	1314V3-05-B01 (0-5)	Solid	12/09/16 10:20	12/10/16 07:15

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Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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	☼	12/10/16 08:55	12/12/16 19:20	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 120	12/10/16 08:55	12/12/16 19:20	1
Dibromofluoromethane	119		75 - 120	12/10/16 08:55	12/12/16 19:20	1
1,2-Dichloroethane-d4 (Surr)	125		69 - 134	12/10/16 08:55	12/12/16 19:20	1
Toluene-d8 (Surr)	108		75 - 123	12/10/16 08:55	12/12/16 19:20	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	☼	12/20/16 16:13	12/21/16 12:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Acenaphthylene	0.0058	J	0.038	0.0051	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Phenanthrene	0.053		0.038	0.0054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Anthracene	0.010	J	0.038	0.0064	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Fluoranthene	0.084		0.038	0.0071	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Pyrene	0.086		0.038	0.0077	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[a]anthracene	0.042		0.038	0.0052	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.047		0.038	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[b]fluoranthene	0.058		0.038	0.0083	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[k]fluoranthene	0.018 J		0.038	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[a]pyrene	0.041		0.038	0.0075	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Indeno[1,2,3-cd]pyrene	0.024 J		0.038	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[g,h,i]perylene	0.032 J		0.038	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/20/16 16:13	12/21/16 12:08	1
Phenol-d5	87		36 - 123	12/20/16 16:13	12/21/16 12:08	1
Nitrobenzene-d5	90		33 - 124	12/20/16 16:13	12/21/16 12:08	1
2-Fluorobiphenyl	91		42 - 115	12/20/16 16:13	12/21/16 12:08	1
2,4,6-Tribromophenol	83		25 - 130	12/20/16 16:13	12/21/16 12:08	1
Terphenyl-d14	102		25 - 150	12/20/16 16:13	12/21/16 12:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28 J F1		1.1	0.23	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Arsenic	4.4		0.55	0.26	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Barium	81 F1		0.55	0.10	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Beryllium	0.46		0.22	0.048	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Boron	4.6 F1		2.8	0.39	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Cadmium	0.30 B		0.11	0.032	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Calcium	27000 B		11	3.6	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Chromium	11		0.55	0.095	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Cobalt	7.9		0.28	0.063	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Copper	12		0.55	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Iron	12000 B		11	4.3	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Lead	23		0.28	0.14	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Magnesium	11000		5.5	2.2	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Manganese	430		0.55	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Nickel	15		0.55	0.15	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Potassium	980 F1		28	4.5	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Selenium	0.35 J B F1		0.55	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Sodium	120		55	7.3	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Thallium	<0.55 F1		0.55	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Vanadium	17		0.28	0.081	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Zinc	67 F1		1.1	0.35	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45 J		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 15:31	1
Boron	0.12 J		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:31	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/15/16 15:03	12/20/16 15:31	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 15:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 15:31	1
Manganese	0.99		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 15:31	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Zinc	0.076	J	0.50	0.020	mg/L		12/15/16 15:03	12/20/16 15:31	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		12/15/16 14:57	12/19/16 20:05	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		12/15/16 15:03	12/16/16 17:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 17:32	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		12/15/16 13:00	12/16/16 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065		0.018	0.0094	mg/Kg	☼	12/15/16 17:00	12/16/16 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/16/16 15:44	1

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/10/16 08:55	12/12/16 19:46	1
Dibromofluoromethane	120		75 - 120	12/10/16 08:55	12/12/16 19:46	1
1,2-Dichloroethane-d4 (Surr)	132		69 - 134	12/10/16 08:55	12/12/16 19:46	1
Toluene-d8 (Surr)	107		75 - 123	12/10/16 08:55	12/12/16 19:46	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	☼	12/20/16 16:13	12/21/16 12:36	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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	0.048	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachlorocyclopentadiene	<0.81	F1	0.81	0.23	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dinitrophenol	<0.81	F1 *	0.81	0.71	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Nitrophenol	<0.81	F2	0.81	0.38	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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	☼	12/20/16 16:13	12/21/16 12:36	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Indeno[1,2,3-cd]pyrene	<0.040	F1	0.040	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Dibenz(a,h)anthracene	<0.040	F1	0.040	0.0078	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[g,h,i]perylene	<0.040	F1	0.040	0.013	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/20/16 16:13	12/21/16 12:36	1
Phenol-d5	71		36 - 123	12/20/16 16:13	12/21/16 12:36	1
Nitrobenzene-d5	88		33 - 124	12/20/16 16:13	12/21/16 12:36	1
2-Fluorobiphenyl	89		42 - 115	12/20/16 16:13	12/21/16 12:36	1
2,4,6-Tribromophenol	89		25 - 130	12/20/16 16:13	12/21/16 12:36	1
Terphenyl-d14	107		25 - 150	12/20/16 16:13	12/21/16 12:36	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	☼	12/15/16 09:32	12/15/16 17:58	1
Arsenic	9.5		0.61	0.28	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Barium	110		0.61	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Beryllium	0.50		0.24	0.053	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Boron	2.7	J	3.0	0.43	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Cadmium	0.093	J B	0.12	0.035	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Calcium	4300	B	12	3.9	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Chromium	14		0.61	0.10	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Cobalt	9.1		0.30	0.069	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Copper	13		0.61	0.13	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Iron	19000	B	12	4.7	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Lead	9.8		0.30	0.15	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Magnesium	3200		6.1	2.5	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Manganese	160		0.61	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Nickel	20		0.61	0.17	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Potassium	910		30	5.0	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Selenium	0.34	J B	0.61	0.30	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Sodium	140		61	8.0	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Vanadium	26		0.30	0.089	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Zinc	70		1.2	0.39	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	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		12/15/16 15:03	12/20/16 15:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 15:38	1
Boron	0.074	J	0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:38	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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		12/15/16 15:03	12/20/16 15:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 15:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 15:38	1
Manganese	1.4		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Nickel	0.019	J	0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 15:38	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Zinc	<0.50		0.50	0.020	mg/L		12/15/16 15:03	12/20/16 15:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.52		0.025	0.010	mg/L		12/15/16 14:57	12/19/16 20:12	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		12/15/16 15:03	12/16/16 17:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 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		12/15/16 13:00	12/16/16 09:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.020	0.011	mg/Kg	☼	12/15/16 17:00	12/16/16 09:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.0		0.2	0.2	SU			12/16/16 15:46	1

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/10/16 08:55	12/12/16 20:38	1
Dibromofluoromethane	119		75 - 120	12/10/16 08:55	12/12/16 20:38	1
1,2-Dichloroethane-d4 (Surr)	127		69 - 134	12/10/16 08:55	12/12/16 20:38	1
Toluene-d8 (Surr)	109		75 - 123	12/10/16 08:55	12/12/16 20:38	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	☼	12/20/16 16:13	12/21/16 13:04	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Phenanthrene	0.026	J	0.036	0.0050	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Fluoranthene	0.053		0.036	0.0067	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Pyrene	0.045		0.036	0.0072	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[a]anthracene	0.024	J	0.036	0.0049	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.030	J	0.036	0.0099	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[b]fluoranthene	0.036		0.036	0.0078	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[k]fluoranthene	0.015	J	0.036	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[a]pyrene	0.024	J	0.036	0.0070	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Indeno[1,2,3-cd]pyrene	0.013	J	0.036	0.0094	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[g,h,i]perylene	0.016	J	0.036	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		40 - 130	12/20/16 16:13	12/21/16 13:04	1
Phenol-d5	83		36 - 123	12/20/16 16:13	12/21/16 13:04	1
Nitrobenzene-d5	87		33 - 124	12/20/16 16:13	12/21/16 13:04	1
2-Fluorobiphenyl	88		42 - 115	12/20/16 16:13	12/21/16 13:04	1
2,4,6-Tribromophenol	82		25 - 130	12/20/16 16:13	12/21/16 13:04	1
Terphenyl-d14	104		25 - 150	12/20/16 16:13	12/21/16 13:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.22	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Arsenic	5.6		0.54	0.25	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Barium	64		0.54	0.099	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Beryllium	0.54		0.22	0.047	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Boron	2.0	J	2.7	0.38	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Cadmium	0.13	B	0.11	0.031	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Calcium	30000	B	11	3.5	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Chromium	11		0.54	0.093	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Cobalt	9.9		0.27	0.061	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Copper	11		0.54	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Iron	19000	B	11	4.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Lead	13		0.27	0.13	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Magnesium	14000		5.4	2.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Manganese	640		0.54	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Nickel	20		0.54	0.15	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Potassium	550		27	4.4	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Selenium	0.28	J B	0.54	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Sodium	83		54	7.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Vanadium	21		0.27	0.079	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Zinc	43		1.1	0.34	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	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		12/15/16 15:03	12/20/16 15:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 15:51	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:51	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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		12/15/16 15:03	12/20/16 15:51	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 15:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 15:51	1
Manganese	3.0		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 15:51	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Zinc	<0.50		0.50	0.020	mg/L		12/15/16 15:03	12/20/16 15:51	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		12/15/16 14:57	12/19/16 20:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/15/16 15:03	12/16/16 17:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 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		12/15/16 13:00	12/16/16 09:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.018	0.0092	mg/Kg	☼	12/15/16 17:00	12/16/16 10:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/16/16 15:52	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121303-1

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
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: 500-121303-1

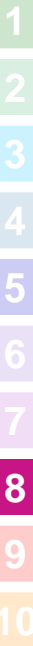
Laboratory: TestAmerica Chicago

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 ENVIRONMENT

2417 Bond Street, University Park, IL
 Phone: 708.534.5200 Fax: 708.1



500-121303 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 #: 500-121303
 Chain of Custody Number: EE4632
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter					Preservative Key	
Project Name		Lab Project #		Matrix		Parameter						
Project Location/State		Lab Project #		Matrix		Parameter					Comments	
Sample		Lab PM		Matrix		Parameter						
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total PAH	Metals	TCAP/SPAP	PAH/PA
1		1314V3-05-B02 (0-6)	12-9-16	0825	2 S	S	X	X	X	X	X	
2		1314V3-05-B02 (6-10.6)	12-9-16	0830	2 S	S	X	X	X	X	X	64C08
3		1314V3-05-B03 (0-5.9)	12-9-16	0845	2 S	S	X	X	X	X	X	
4		1314V3-05-B01 (0-5)	12-9-16	1020	2 S	S	X	X	X	X	X	
12-9-16												

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: <u>EE</u> Company: _____ Date: <u>12-9-16</u> Time: <u>1530</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/9/16</u> Time: <u>1530</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/9/16</u> Time: <u>1800</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/10/16</u> Time: <u>0715</u>
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____

Lab Courier: _____

Shipped: _____

Hand Delivered: _____

Matrix Key

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

Client Comments:

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-121303-1

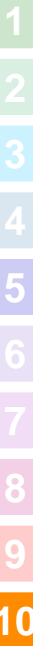
Login Number: 121303

List Source: TestAmerica Chicago

List Number: 1

Creator: James, Jeff A

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	4.0
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	





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):

2020 River Drive (ISGS #1314V3-6)

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: 41.51233 Longitude: -90.50987

(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: 1610455150 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: 41.51233 Longitude: -90.50987

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 1314V3-05-B01 and 1314V3-06-B03, -B04, -B05, -B06, -B09, -B10, and -B11 were sampled within the construction zone adjacent to ISGS #1314V3-6 (Vacant Land). Refer to PSI Report for ISGS #1314V3-6 (Vacant Land) including Table 4-4, and Figures 4-1, 4-2, 4-5, 4-6, 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 J121163-2, J121261-3, J121429-2, and J121303-1.

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.

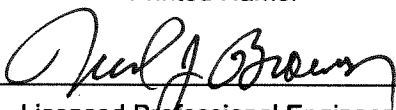
Street Address: 33 West Monroe Street

City: Chicago State: IL Zip Code: 60603

Phone: (312) 578-9243

Neil J. Brown

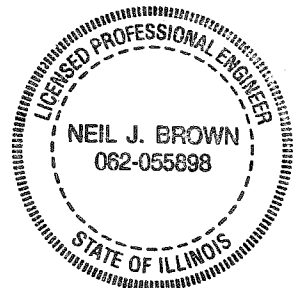
Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

3/17/17

Date:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-6 (Vacant Land)					Comparison Criteria						
	1314V3-06-B03	1314V3-06-B04	1314V3-06-B05	1314V3-06-B06	1314V3-06-B09	MACs			TACO			
BORING	1314V3-06-B03 (0-4)	1314V3-06-B04 (0-5.2)	1314V3-06-B05 (0-8)	1314V3-06-B06 (0-4)	1314V3-06-B09 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	Groundwater
SAMPLE	Soil	Soil	Soil	Soil	Soil							
MATRIX												
DEPTH (feet)	0-4	0-5.2	0-8	0-4	0-2							
pH	8.6	8.3	8	8.3	8							
VOCs (None Detected)												
SVOCs (mg/kg)												
2-Methylnaphthalene	ND U	0.02 J	0.12	0.36	0.66	--	--	--	--	--	--	--
3 & 4 Methylphenol	ND U	ND U	ND U	0.47	ND U	--	--	--	--	--	--	--
4-Nitroaniline	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--
Acenaphthene	ND U	0.019 J	ND U	0.02 J	0.042 J	570	--	--	4,700	120,000	--	0.42
Acenaphthylene	ND U	0.011 J	ND U	0.0096 J	0.03 J	--	--	--	--	--	--	--
Anthracene	ND U	0.057	0.0073 J	0.04	0.074 J	12,000	--	--	23,000	610,000	--	2.1
Benzo(a)anthracene	0.014 J	0.23	0.052	0.22	0.5	0.9	1.8	1.1	1.8	170	--	0.00013
Benzo(a)pyrene	0.019 J	0.24 †	0.067	0.34 †	0.73 †	0.09	2.1	1.3	2.1	17	--	0.0002
Benzo(b)fluoranthene	0.031 J	0.4	0.12	0.58	1.2 †	0.9	2.1	1.5	2.1	170	--	0.00018
Benzo(g,h,i)perylene	ND U	0.096	0.049	0.15	0.29	--	--	--	--	--	--	--
Benzo(k)fluoranthene	0.014 J	0.13	0.037 J	0.21	0.4	9	--	--	9	1,700	--	0.00017
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--	--
Chrysene	0.016 J	0.25	0.083	0.29	0.58	88	--	--	88	17,000	--	0.0015
Dibenz(a,h)anthracene	ND U	0.03 J	0.016 J	0.047	0.069 J	0.09	0.42	0.2	0.42	17	--	0.0003
Dibenzofuran	ND U	ND U	ND U	0.17 J	0.23 J	--	--	--	--	--	--	--
Fluoranthene	0.033 J	0.51	0.096	0.35	0.68	3,100	--	--	3,100	82,000	--	0.28
Fluorene	ND U	0.015 J	0.0075 J	0.016 J	0.028 J	560	--	--	3,100	82,000	--	0.28
Indeno(1,2,3-cd)pyrene	ND U	0.099	0.045	0.14	0.34	0.9	1.6	0.9	1.6	170	--	0.00043
Naphthalene	ND U	0.017 J	0.097	0.21	0.48	1.8	--	--	170	1.8	--	0.14
Phenanthrene	0.014 J	0.28	0.13	0.35	0.85	--	--	--	--	--	--	--
Pyrene	0.028 J	0.45	0.072	0.41	1.2	2300	--	--	2,300	61,000	--	0.21
PCBs (mg/kg)												
PCB-1254	NA	0.039	ND U	NA	NA	1	--	--	1	1	--	0.0005
PCB-1260	NA	0.021	ND U	NA	NA	1	--	--	1	1	--	0.0005
PCBs, total	NA	0.06	ND	NA	NA	--	--	--	--	--	--	--
Inorganics (mg/kg)												
Antimony	0.25 J	ND U	ND U	0.42 J	ND U	5	--	--	31	82	--	0.006
Arsenic	4.7	4.3	2.4	5.6	5.7	11.3	13	--	13	61	--	0.05
Barium	70	73	75	61	60	1,500	--	--	5,500	14,000	--	2
Beryllium	0.48	0.41	0.41	0.3	0.53 J	22	--	--	160	410	--	0.004
Boron	2.2 J	4.4	5.6	5.6	6.5 J	40	--	--	16,000	41,000	--	2
Cadmium	0.21	0.42	0.26	1.4	0.44 J	5.2	--	--	78	200	--	0.005
Calcium	30,000	43,000	3,800	27,000	23,000	--	--	--	--	--	--	--
Chromium	13	16	13	42 †	21	21	--	--	230	690	--	0.1
Cobalt	5.3	7.1	6.1	3.9	3.3	20	--	--	4,700	12,000	--	1
Copper	11	15	14	86	20	2,900	--	--	2,900	8,200	--	0.65
Iron	13,000	13,000	11,000	29,000 †m	17,000 †m	15,000	15,900	--	--	--	--	5
Lead	6.9	83	16	230 †	39	107	--	--	400	700	--	0.0075
Magnesium	17,000	13,000	1,300	3,800	4,000	325,000	--	--	--	730,000	--	--
Manganese	290	390	410	510	440	630	636	--	1,600	4,100	--	0.15
Mercury	ND U	0.045	0.16	0.059	0.046	0.89	--	--	10	0.1	--	0.002
Nickel	16	17	23	68	49	100	--	--	1,600	4,100	--	0.1
Potassium	480	610	1,200	550	610	--	--	--	--	--	--	--
Selenium	ND U	ND U	ND U	ND U	ND U	1.3	--	--	390	1,000	--	0.05
Silver	ND U	ND U	ND U	0.46	0.81 J	4.4	--	--	390	1,000	--	0.05
Sodium	120	160	120	160	140 J	--	--	--	--	--	--	--
Thallium	0.62	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--	0.002
Vanadium	23	18	15	11	45	550	--	--	550	1,400	--	0.049
Zinc	27	98	66	200	72	5,100	--	--	23,000	61,000	--	5
TCLP Metals (mg/L)												
Barium	0.98	0.71	0.65	0.25 J	0.26 J	--	--	--	--	--	2	--
Boron	ND U	0.062 J	0.17 J	0.14 J	0.061 J	--	--	--	--	--	2	--
Cadmium	0.0029 J	ND U	ND U	0.0026 J	ND U	--	--	--	--	--	0.005	--
Chromium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1	--
Cobalt	ND U	ND U	0.034	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	0.81 L	1.6 L	10 L	0.24 L	0.92 L	--	--	--	--	--	0.15	--
Nickel	0.021 J	ND U	0.03	0.017 J	0.05	--	--	--	--	--	0.1	--
Selenium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05	--
Thallium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.002	--
Zinc	0.057 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	0.17 L	0.29 L	0.44 L	0.013 J	0.17 L	--	--	--	--	--	0.15	--
Nickel	NA	NA	NA	NA	NA	--	--	--	--	--	0.1	--
Zinc	NA	NA	NA	NA	NA	--	--	--	--	--	5	--

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-6 (Vacant Land)				ISGS #1314V3-5 (Industrial Building)	Comparison Criteria								
	1314V3-06-B10		1314V3-06-B11		1314V3-05-B01	MACs			TACO					
BORING	1314V3-06-B10 (0-6)		1314V3-06-B11 (6-11)		1314V3-06-B11 (0-6)	1314V3-06-B11 (6-10.7)	1314V3-05-B01 (0-5)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	Groundwater
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil								
MATRIX	0-6	6-11	0-6	6-10.7	0-5									
DEPTH (feet)	0-6	6-11	0-6	6-10.7	0-5									
pH	8.3	8.4	7.8	8.2	8.1									
VOCs (None Detected)														
SVOCs (soil: mg/kg, water: mg/L)														
2-Methylnaphthalene	0.021 J	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	--
3 & 4 Methylphenol	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	--
4-Nitroaniline	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	--
Acenaphthene	0.0072 J	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--	--	0.42
Acenaphthylene	0.023 J	0.017 J	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	--
Anthracene	0.031 J	0.033 J	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--	--	2.1
Benzo(a)anthracene	0.15	0.14	ND U	0.014 J	0.024 J	0.024 J	0.9	1.8	1.1	1.8	170	--	--	0.00013
Benzo(a)pyrene	0.17 †	0.1 †	ND U	0.015 J	0.024 J	0.024 J	0.09	2.1	1.3	2.1	17	--	--	0.0002
Benzo(b)fluoranthene	0.23 J	0.15	ND U	0.019 J	0.036	0.036	0.9	2.1	1.5	2.1	170	--	--	0.00018
Benzo(g,h,i)perylene	0.098 J	0.052	ND U	ND U	0.016 J	0.016 J	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	0.1 J	0.066	ND U	ND U	0.015 J	0.015 J	9	--	--	9	1,700	--	--	0.00017
Carbazole	ND U	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--	--	--
Chrysene	0.19	0.13	ND U	0.017 J	0.03 J	0.03 J	88	--	--	88	17,000	--	--	0.0015
Dibenz(a,h)anthracene	0.03 J	0.022 J	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--	--	0.0003
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	--
Fluoranthene	0.37	0.3	ND U	0.03 J	0.053	0.053	3,100	--	--	3,100	82,000	--	--	0.28
Fluorene	0.0098 J	0.011 J	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--	--	0.28
Indeno(1,2,3-cd)pyrene	0.093 J	0.052	ND U	ND U	0.013 J	0.013 J	0.9	1.6	0.9	1.6	170	--	--	0.00043
Naphthalene	0.018 J	0.0057 J	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--	--	0.14
Phenanthrene	0.23	0.16	ND U	0.017 J	0.026 J	0.026 J	--	--	--	--	--	--	--	--
Pyrene	0.34	0.25	ND U	0.03 J	0.045	0.045	2300	--	--	2,300	61,000	--	--	0.21
PCBs (soil: mg/kg, water: mg/L)														
PCB-1254	NA	NA	NA	NA	NA	NA	1	--	--	1	1	--	--	0.0005
PCB-1260	NA	NA	NA	NA	NA	NA	1	--	--	1	1	--	--	0.0005
PCBs, total	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
Inorganics (soil: mg/kg, water: mg/L)														
Antimony	ND U	ND U	ND U	ND U	0.3 J	0.3 J	5	--	--	31	82	--	--	0.006
Arsenic	2.1	3.8	2.1	2.4	5.6	5.6	11.3	13	--	13	61	--	--	0.05
Barium	24	38	32	51	64	64	1,500	--	--	5,500	14,000	--	--	2
Beryllium	0.37	0.16 J	0.26	0.24	0.54	0.54	22	--	--	160	410	--	--	0.004
Boron	3.4	0.91 J	1.1 J	1.3 J	2 J	2 J	40	--	--	16,000	41,000	--	--	2
Cadmium	0.17	0.085 J	0.098 J	0.15	ND U	ND U	5.2	--	--	78	200	--	--	0.005
Calcium	5,900	1,700	1,600	7,200	30,000	30,000	--	--	--	--	--	--	--	--
Chromium	7.7	7.1	7.5	8.5	11	11	21	--	--	230	690	--	--	0.1
Cobalt	3.7	3.1	3.9	4.5	9.9	9.9	20	--	--	4,700	12,000	--	--	1
Copper	9.7	6.1	7.3	8.3	11	11	2,900	--	--	2,900	8,200	--	--	0.65
Iron	8,800	8,500	7,900	8,100	19,000 †m	19,000 †m	15,000	15,900	--	--	--	--	--	5
Lead	18	2.3	3.7	7	13	13	107	--	--	400	700	--	--	0.0075
Magnesium	910	1,200	1,100	1,300	14,000	14,000	325,000	--	--	--	730,000	--	--	--
Manganese	120	190	180	410	640 †m	640 †m	630	636	--	1,600	4,100	--	--	0.15
Mercury	0.026	ND U	0.012 J	0.017 J	0.013 J	0.013 J	0.89	--	--	10	0.1	--	--	0.002
Nickel	9.3	8.7	8.8	13	20	20	100	--	--	1,600	4,100	--	--	0.1
Potassium	420	210	390	360	550	550	--	--	--	--	--	--	--	--
Selenium	ND U	0.28 J	ND U	0.39 J	ND U	ND U	1.3	--	--	390	1,000	--	--	0.05
Silver	ND U	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--	--	0.05
Sodium	65	49 J	36 J	50 J	83	83	--	--	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--	--	0.002
Vanadium	13	10	13	12	21	21	550	--	--	550	1,400	--	--	0.049
Zinc	48	16	21	24	43	43	5,100	--	--	23,000	61,000	--	--	5
TCLP Metals (mg/L)														
Barium	0.29 J	0.53	0.19 J	0.38 J	0.67	0.67	--	--	--	--	--	2	--	--
Boron	ND U	ND U	0.057 J	ND U	ND U	ND U	--	--	--	--	--	2	--	--
Cadmium	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005	--	--
Chromium	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1	--	--
Cobalt	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	1	--	--
Iron	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5	--	--
Lead	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075	--	--
Manganese	0.76 L	1.8 L	0.095	0.74 L	3 L	3 L	--	--	--	--	--	0.15	--	--
Nickel	ND U	0.03	ND U	0.02 J	ND U	ND U	--	--	--	--	--	0.1	--	--
Selenium	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05	--	--
Thallium	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.002	--	--
Zinc	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5	--	--
SPLP Metals (mg/L)														
Cadmium	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.005	--	--
Iron	NA	NA	NA	NA	NA	NA	--	--	--	--	--	5	--	--
Lead	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075	--	--
Manganese	0.11	0.091	NA	0.28 L	ND U	ND U	--	--	--	--	--	0.15	--	--
Nickel	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.1	--	--
Zinc	NA	NA	NA	NA	NA	NA	--	--	--	--	--	5	--	--

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
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TestAmerica Job ID: 500-121163-2
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:
12/22/2016 2:52:55 PM

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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.

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Case Narrative

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

TestAmerica Job ID: 500-121163-2

Job ID: 500-121163-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121163-2

Comments

No additional comments.

Receipt

The samples were received on 12/8/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 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

Method(s) 8270D: The method blank for preparation batch 500-364997 contained Naphthalene 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.

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 365567 had 1 analyte outside control limits: 4-Nitroaniline. These results have been reported and qualified. (LCS 500-365567/2-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 500-364421 and 500-364618 contained Lead above the reporting limit (RL). The samples 1314V3-06-B10 (0-6) (500-121163-2), 1314V3-06-B10 (6-11) (500-121163-3), 1314V3-06-B11 (0-6) (500-121163-4) and 1314V3-06-B11 (6-10.7) (500-121163-5) associated with this LB did not contain the target compound; therefore, re-extraction and/or re-analysis of the samples were not performed.

Method(s) 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-364837, at line 160, recovered above the upper control limit for Thallium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (0-6)

Lab Sample ID: 500-121163-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.018	J	0.035	0.0054	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.021	J	0.071	0.0065	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.023	J	0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0072	J	0.035	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0098	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.23		0.035	0.0049	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.031	J	0.035	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.37		0.035	0.0065	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.34		0.035	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.15		0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.19		0.035	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.23	F1	0.035	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.10	F1	0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.17		0.035	0.0068	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.093	F1	0.035	0.0092	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.030	J F1	0.035	0.0068	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.098	F1	0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.1		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	24		0.53	0.096	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.37		0.21	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	3.4		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.11	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	5900		11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.7	B	0.53	0.090	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.7		0.26	0.059	mg/Kg	1	☼	6010B	Total/NA
Copper	9.7		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	8800		11	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	910		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	120		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.3		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	420		26	4.3	mg/Kg	1	☼	6010B	Total/NA
Sodium	65		53	6.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.29	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.76		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		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: 1314V3-06-B10 (6-11)

Lab Sample ID: 500-121163-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0057	J	0.034	0.0053	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.017	J	0.034	0.0045	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.011	J	0.034	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.034	0.0048	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.033	J	0.034	0.0058	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: 500-121163-2

Client Sample ID: 1314V3-06-B10 (6-11) (Continued)

Lab Sample ID: 500-121163-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.30		0.034	0.0064	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.25		0.034	0.0068	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.14		0.034	0.0046	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.13		0.034	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.15		0.034	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.066		0.034	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.10		0.034	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.052		0.034	0.0089	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.022	J	0.034	0.0067	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.052		0.034	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.8		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.16	J	0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	0.91	J	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.085	J	0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	1700		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.1	B	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.1		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	6.1		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	8500		10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	2.3		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1200		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	190		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.7		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	210		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.28	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	49	J	51	6.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	10		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	16		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.032	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.091		0.025	0.010	mg/L	1		6010B	SPLP East
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-06-B11 (0-6)

Lab Sample ID: 500-121163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.1		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.54	0.099	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.26		0.22	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	1.1	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	1600		11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.5	B	0.54	0.093	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.9		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	7.3		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	7900		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	3.7		0.27	0.13	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: 500-121163-2

Client Sample ID: 1314V3-06-B11 (0-6) (Continued)

Lab Sample ID: 500-121163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1100		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	180		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.8		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	390		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Sodium	36	J	54	7.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.27	0.079	mg/Kg	1	☼	6010B	Total/NA
Zinc	21		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.19	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.057	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.095		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.012	J	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: 1314V3-06-B11 (6-10.7)

Lab Sample ID: 500-121163-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.017	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.030	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.030	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.014	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.017	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.019	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.015	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.4		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	51		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.24		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	1.3	J	2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	7200		11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.5	B	0.53	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.5		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	8.3		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	8100		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.0		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1300		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	360		27	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.39	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	50	J	53	7.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	24		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.022	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.28		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.018	0.0092	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: 500-121163-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121163-2	1314V3-06-B10 (0-6)	Solid	12/07/16 10:10	12/08/16 09:00
500-121163-3	1314V3-06-B10 (6-11)	Solid	12/07/16 10:15	12/08/16 09:00
500-121163-4	1314V3-06-B11 (0-6)	Solid	12/07/16 10:40	12/08/16 09:00
500-121163-5	1314V3-06-B11 (6-10.7)	Solid	12/07/16 10:45	12/08/16 09:00

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Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (0-6)

Lab Sample ID: 500-121163-2

Date Collected: 12/07/16 10:10

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.9

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	☼	12/08/16 13:05	12/09/16 15:36	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/08/16 13:05	12/09/16 15:36	1
Dibromofluoromethane	109		75 - 120	12/08/16 13:05	12/09/16 15:36	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/08/16 13:05	12/09/16 15:36	1
Toluene-d8 (Surr)	97		75 - 123	12/08/16 13:05	12/09/16 15:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.078	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (0-6)

Lab Sample ID: 500-121163-2

Date Collected: 12/07/16 10:10

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Naphthalene	0.018	J	0.035	0.0054	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Hexachlorocyclopentadiene	<0.71	F1	0.71	0.20	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2-Methylnaphthalene	0.021	J	0.071	0.0065	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,4-Dinitrophenol	<0.71	F1	0.71	0.62	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Acenaphthylene	0.023	J	0.035	0.0047	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Acenaphthene	0.0072	J	0.035	0.0063	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
4-Nitrophenol	<0.71	F1	0.71	0.34	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Fluorene	0.0098	J	0.035	0.0050	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
4-Nitroaniline	<0.35	*	0.35	0.15	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Phenanthrene	0.23		0.035	0.0049	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Anthracene	0.031	J	0.035	0.0059	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Fluoranthene	0.37		0.035	0.0065	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Pyrene	0.34		0.035	0.0070	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Benzo[a]anthracene	0.15		0.035	0.0048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (0-6)

Lab Sample ID: 500-121163-2

Date Collected: 12/07/16 10:10

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.19		0.035	0.0096	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Benzo[b]fluoranthene	0.23	F1	0.035	0.0076	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Benzo[k]fluoranthene	0.10	F1	0.035	0.010	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Benzo[a]pyrene	0.17		0.035	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Indeno[1,2,3-cd]pyrene	0.093	F1	0.035	0.0092	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Dibenz(a,h)anthracene	0.030	J F1	0.035	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
Benzo[g,h,i]perylene	0.098	F1	0.035	0.011	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/16/16 18:31	12/20/16 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		40 - 130	12/16/16 18:31	12/20/16 13:49	1
Phenol-d5	85		36 - 123	12/16/16 18:31	12/20/16 13:49	1
Nitrobenzene-d5	82		33 - 124	12/16/16 18:31	12/20/16 13:49	1
2-Fluorobiphenyl	79		42 - 115	12/16/16 18:31	12/20/16 13:49	1
2,4,6-Tribromophenol	74		25 - 130	12/16/16 18:31	12/20/16 13:49	1
Terphenyl-d14	93		25 - 150	12/16/16 18:31	12/20/16 13:49	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	☼	12/10/16 10:04	12/10/16 18:56	1
Arsenic	2.1		0.53	0.24	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Barium	24		0.53	0.096	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Beryllium	0.37		0.21	0.045	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Boron	3.4		2.6	0.37	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Cadmium	0.17		0.11	0.030	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Calcium	5900		11	3.4	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Chromium	7.7	B	0.53	0.090	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Cobalt	3.7		0.26	0.059	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Copper	9.7		0.53	0.11	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Iron	8800		11	4.0	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Lead	18		0.26	0.13	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Magnesium	910		5.3	2.1	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Manganese	120		0.53	0.10	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Nickel	9.3		0.53	0.14	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Potassium	420		26	4.3	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Selenium	<0.53		0.53	0.26	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Sodium	65		53	6.9	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Vanadium	13		0.26	0.077	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1
Zinc	48		1.1	0.33	mg/Kg	☼	12/10/16 10:04	12/10/16 18:56	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.29	J	0.50	0.050	mg/L		12/12/16 09:08	12/13/16 17:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/12/16 09:08	12/13/16 17:42	1
Boron	<0.50		0.50	0.050	mg/L		12/12/16 09:08	12/13/16 17:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (0-6)

Lab Sample ID: 500-121163-2

Date Collected: 12/07/16 10:10

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.9

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		12/12/16 09:08	12/13/16 17:42	1
Chromium	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:42	1
Cobalt	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:42	1
Iron	<0.40		0.40	0.20	mg/L		12/12/16 09:08	12/13/16 17:42	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/12/16 09:08	12/13/16 17:42	1
Manganese	0.76		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:42	1
Nickel	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:42	1
Selenium	<0.050		0.050	0.020	mg/L		12/12/16 09:08	12/13/16 17:42	1
Silver	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:42	1
Zinc	0.14	J B	0.50	0.020	mg/L		12/12/16 09:08	12/13/16 17:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.11		0.025	0.010	mg/L		12/12/16 09:04	12/15/16 14:10	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		12/12/16 09:08	12/12/16 21:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/12/16 09:08	12/12/16 21:25	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		12/12/16 12:00	12/13/16 10:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.017	0.0089	mg/Kg	☼	12/09/16 15:45	12/12/16 12:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/12/16 13:08	1

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (6-11)

Lab Sample ID: 500-121163-3

Date Collected: 12/07/16 10:15

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Carbon disulfide	<0.0043		0.0043	0.00088	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/08/16 13:05	12/09/16 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/08/16 13:05	12/09/16 16:02	1
Dibromofluoromethane	108		75 - 120	12/08/16 13:05	12/09/16 16:02	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	12/08/16 13:05	12/09/16 16:02	1
Toluene-d8 (Surr)	109		75 - 123	12/08/16 13:05	12/09/16 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.076	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (6-11)

Lab Sample ID: 500-121163-3

Date Collected: 12/07/16 10:15

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
N-Nitrosodi-n-propylamine	<0.069		0.069	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Naphthalene	0.0057	J	0.034	0.0053	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2-Nitrophenol	<0.34		0.34	0.081	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,4-Dinitrophenol	<0.69		0.69	0.61	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Acenaphthylene	0.017	J	0.034	0.0045	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
4-Nitrophenol	<0.69		0.69	0.33	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Fluorene	0.011	J	0.034	0.0048	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
4-Nitroaniline	<0.34	*	0.34	0.14	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Hexachlorobenzene	<0.069		0.069	0.0080	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.28	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Phenanthrene	0.16		0.034	0.0048	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Anthracene	0.033	J	0.034	0.0058	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Carbazole	<0.17		0.17	0.086	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Fluoranthene	0.30		0.034	0.0064	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Pyrene	0.25		0.034	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Benzo[a]anthracene	0.14		0.034	0.0046	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (6-11)

Lab Sample ID: 500-121163-3

Date Collected: 12/07/16 10:15

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.13		0.034	0.0094	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Benzo[b]fluoranthene	0.15		0.034	0.0074	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Benzo[k]fluoranthene	0.066		0.034	0.010	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Benzo[a]pyrene	0.10		0.034	0.0067	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Indeno[1,2,3-cd]pyrene	0.052		0.034	0.0089	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Dibenz(a,h)anthracene	0.022	J	0.034	0.0067	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
Benzo[g,h,i]perylene	0.052		0.034	0.011	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	12/16/16 18:31	12/20/16 14:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/16/16 18:31	12/20/16 14:17	1
Phenol-d5	98		36 - 123	12/16/16 18:31	12/20/16 14:17	1
Nitrobenzene-d5	94		33 - 124	12/16/16 18:31	12/20/16 14:17	1
2-Fluorobiphenyl	92		42 - 115	12/16/16 18:31	12/20/16 14:17	1
2,4,6-Tribromophenol	93		25 - 130	12/16/16 18:31	12/20/16 14:17	1
Terphenyl-d14	108		25 - 150	12/16/16 18:31	12/20/16 14:17	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	☼	12/10/16 10:04	12/10/16 18:59	1
Arsenic	3.8		0.51	0.24	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Barium	38		0.51	0.094	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Beryllium	0.16	J	0.20	0.044	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Boron	0.91	J	2.6	0.36	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Cadmium	0.085	J	0.10	0.030	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Calcium	1700		10	3.3	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Chromium	7.1	B	0.51	0.088	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Cobalt	3.1		0.26	0.058	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Copper	6.1		0.51	0.11	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Iron	8500		10	3.9	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Lead	2.3		0.26	0.13	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Magnesium	1200		5.1	2.1	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Manganese	190		0.51	0.10	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Nickel	8.7		0.51	0.14	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Potassium	210		26	4.2	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Selenium	0.28	J	0.51	0.25	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Sodium	49	J	51	6.7	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Vanadium	10		0.26	0.075	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	1
Zinc	16		1.0	0.32	mg/Kg	☼	12/10/16 10:04	12/10/16 18:59	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		12/12/16 09:08	12/13/16 17:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/12/16 09:08	12/13/16 17:58	1
Boron	<0.50		0.50	0.050	mg/L		12/12/16 09:08	12/13/16 17:58	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B10 (6-11)

Lab Sample ID: 500-121163-3

Date Collected: 12/07/16 10:15

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 92.6

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		12/12/16 09:08	12/13/16 17:58	1
Chromium	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:58	1
Cobalt	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:58	1
Iron	<0.40		0.40	0.20	mg/L		12/12/16 09:08	12/13/16 17:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/12/16 09:08	12/13/16 17:58	1
Manganese	1.8		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:58	1
Nickel	0.030		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:58	1
Selenium	<0.050		0.050	0.020	mg/L		12/12/16 09:08	12/13/16 17:58	1
Silver	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:58	1
Zinc	0.032	J B	0.50	0.020	mg/L		12/12/16 09:08	12/13/16 17:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.091		0.025	0.010	mg/L		12/12/16 09:04	12/15/16 14:17	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		12/12/16 09:08	12/12/16 21:42	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/12/16 09:08	12/12/16 21:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/12/16 12:00	12/13/16 10:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg	☼	12/09/16 15:45	12/12/16 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			12/12/16 13:10	1

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (0-6)

Lab Sample ID: 500-121163-4

Date Collected: 12/07/16 10:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	12/08/16 13:05	12/09/16 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/08/16 13:05	12/09/16 16:27	1
Dibromofluoromethane	109		75 - 120	12/08/16 13:05	12/09/16 16:27	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/08/16 13:05	12/09/16 16:27	1
Toluene-d8 (Surr)	98		75 - 123	12/08/16 13:05	12/09/16 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.078	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (0-6)

Lab Sample ID: 500-121163-4

Date Collected: 12/07/16 10:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
4-Chloroaniline	<0.71		0.71	0.16	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
4-Nitroaniline	<0.35 *		0.35	0.15	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Fluoranthene	<0.035		0.035	0.0065	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Pyrene	<0.035		0.035	0.0070	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (0-6)

Lab Sample ID: 500-121163-4

Date Collected: 12/07/16 10:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.035		0.035	0.0096	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Benzo[b]fluoranthene	<0.035		0.035	0.0076	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Benzo[a]pyrene	<0.035		0.035	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0091	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/16/16 18:31	12/20/16 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		40 - 130	12/16/16 18:31	12/20/16 14:45	1
Phenol-d5	93		36 - 123	12/16/16 18:31	12/20/16 14:45	1
Nitrobenzene-d5	88		33 - 124	12/16/16 18:31	12/20/16 14:45	1
2-Fluorobiphenyl	87		42 - 115	12/16/16 18:31	12/20/16 14:45	1
2,4,6-Tribromophenol	88		25 - 130	12/16/16 18:31	12/20/16 14:45	1
Terphenyl-d14	104		25 - 150	12/16/16 18:31	12/20/16 14:45	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	☼	12/10/16 10:04	12/10/16 19:03	1
Arsenic	2.1		0.54	0.25	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Barium	32		0.54	0.099	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Beryllium	0.26		0.22	0.047	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Boron	1.1 J		2.7	0.38	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Cadmium	0.098 J		0.11	0.031	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Calcium	1600		11	3.5	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Chromium	7.5 B		0.54	0.093	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Cobalt	3.9		0.27	0.061	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Copper	7.3		0.54	0.12	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Iron	7900		11	4.2	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Lead	3.7		0.27	0.13	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Magnesium	1100		5.4	2.2	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Manganese	180		0.54	0.11	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Nickel	8.8		0.54	0.15	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Potassium	390		27	4.4	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Selenium	<0.54		0.54	0.27	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Sodium	36 J		54	7.1	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Vanadium	13		0.27	0.079	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1
Zinc	21		1.1	0.34	mg/Kg	☼	12/10/16 10:04	12/10/16 19:03	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.19 J		0.50	0.050	mg/L		12/12/16 09:08	12/13/16 18:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/12/16 09:08	12/13/16 18:05	1
Boron	0.057 J		0.50	0.050	mg/L		12/12/16 09:08	12/13/16 18:05	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (0-6)

Lab Sample ID: 500-121163-4

Date Collected: 12/07/16 10:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 91.0

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	-	12/12/16 09:08	12/13/16 18:05	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Iron	<0.40		0.40	0.20	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Manganese	0.095		0.025	0.010	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Silver	<0.025		0.025	0.010	mg/L	-	12/12/16 09:08	12/13/16 18:05	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/12/16 09:08	12/13/16 18:05	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	-	12/12/16 09:08	12/12/16 21:46	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L	-	12/12/16 09:08	12/12/16 21:46	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	-	12/12/16 12:00	12/13/16 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.017	0.0091	mg/Kg	☼	12/09/16 15:45	12/12/16 12:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU	-		12/12/16 13:13	1

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (6-10.7)

Lab Sample ID: 500-121163-5

Date Collected: 12/07/16 10:45

Matrix: Solid

Date Received: 12/08/16 09:00

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	0.0071	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	12/08/16 13:05	12/09/16 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/08/16 13:05	12/09/16 16:53	1
Dibromofluoromethane	110		75 - 120	12/08/16 13:05	12/09/16 16:53	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/08/16 13:05	12/09/16 16:53	1
Toluene-d8 (Surr)	105		75 - 123	12/08/16 13:05	12/09/16 16:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (6-10.7)

Lab Sample ID: 500-121163-5

Date Collected: 12/07/16 10:45

Matrix: Solid

Date Received: 12/08/16 09:00

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	☼	12/16/16 18:31	12/20/16 15:41	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
4-Nitroaniline	<0.37 *		0.37	0.16	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Phenanthrene	0.017	J	0.037	0.0052	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Fluoranthene	0.030	J	0.037	0.0069	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Pyrene	0.030	J	0.037	0.0074	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Benzo[a]anthracene	0.014	J	0.037	0.0050	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (6-10.7)

Lab Sample ID: 500-121163-5

Date Collected: 12/07/16 10:45

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.017	J	0.037	0.010	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Benzo[b]fluoranthene	0.019	J	0.037	0.0080	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Benzo[a]pyrene	0.015	J	0.037	0.0072	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/16/16 18:31	12/20/16 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		40 - 130	12/16/16 18:31	12/20/16 15:41	1
Phenol-d5	81		36 - 123	12/16/16 18:31	12/20/16 15:41	1
Nitrobenzene-d5	79		33 - 124	12/16/16 18:31	12/20/16 15:41	1
2-Fluorobiphenyl	79		42 - 115	12/16/16 18:31	12/20/16 15:41	1
2,4,6-Tribromophenol	52		25 - 130	12/16/16 18:31	12/20/16 15:41	1
Terphenyl-d14	94		25 - 150	12/16/16 18:31	12/20/16 15:41	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	☼	12/10/16 10:04	12/10/16 19:07	1
Arsenic	2.4		0.53	0.25	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Barium	51		0.53	0.097	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Beryllium	0.24		0.21	0.046	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Boron	1.3	J	2.7	0.37	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Cadmium	0.15		0.11	0.031	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Calcium	7200		11	3.4	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Chromium	8.5	B	0.53	0.092	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Cobalt	4.5		0.27	0.060	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Copper	8.3		0.53	0.12	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Iron	8100		11	4.1	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Lead	7.0		0.27	0.13	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Magnesium	1300		5.3	2.2	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Manganese	410		0.53	0.11	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Nickel	13		0.53	0.14	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Potassium	360		27	4.3	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Selenium	0.39	J	0.53	0.26	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Sodium	50	J	53	7.0	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Vanadium	12		0.27	0.078	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1
Zinc	24		1.1	0.34	mg/Kg	☼	12/10/16 10:04	12/10/16 19:07	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.38	J	0.50	0.050	mg/L		12/12/16 09:08	12/13/16 18:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/12/16 09:08	12/13/16 18:12	1
Boron	<0.50		0.50	0.050	mg/L		12/12/16 09:08	12/13/16 18:12	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121163-2

Client Sample ID: 1314V3-06-B11 (6-10.7)

Lab Sample ID: 500-121163-5

Date Collected: 12/07/16 10:45

Matrix: Solid

Date Received: 12/08/16 09:00

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		12/12/16 09:08	12/13/16 18:12	1
Chromium	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 18:12	1
Cobalt	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 18:12	1
Iron	<0.40		0.40	0.20	mg/L		12/12/16 09:08	12/13/16 18:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/12/16 09:08	12/13/16 18:12	1
Manganese	0.74		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 18:12	1
Nickel	0.020	J	0.025	0.010	mg/L		12/12/16 09:08	12/13/16 18:12	1
Selenium	<0.050		0.050	0.020	mg/L		12/12/16 09:08	12/13/16 18:12	1
Silver	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 18:12	1
Zinc	0.022	J B	0.50	0.020	mg/L		12/12/16 09:08	12/13/16 18:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.28		0.025	0.010	mg/L		12/12/16 09:04	12/15/16 14:24	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		12/12/16 09:08	12/12/16 21:50	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/12/16 09:08	12/12/16 21:50	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		12/12/16 12:00	12/13/16 10:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.018	0.0092	mg/Kg	☼	12/09/16 15:45	12/12/16 12:32	1

General Chemistry

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

Definitions/Glossary

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

TestAmerica Job ID: 500-121163-2

Qualifiers

GC/MS Semi VOA

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

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.
^	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: 500-121163-2

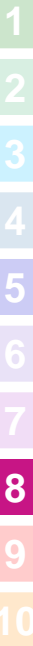
Laboratory: TestAmerica Chicago

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		Water	1,3-Dichloropropene, Total
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)	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 #: 500-121163

Chain of Custody Number: EBV6-26

Page _____ of _____

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments		
EE		109008-0046-61										
Project Name		Lab Project #		Sampling		Matrix		Matrix		Comments		
I 74		50012744		Date Time <td colspan="2"># of Containers <td colspan="2">Matrix <td colspan="2"></td> </td></td>		# of Containers <td colspan="2">Matrix <td colspan="2"></td> </td>		Matrix <td colspan="2"></td>				
Project Location/State		Lab PM										
Rock Island County, IL		D Wright										
Sampler												
S. Cooper												
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total PAH Metals	Temp/spur PAH metal	Pb/Cd/90 Solids	Comments
2		1314V3-06-B10 (0-6)	12-7-16	1010	2 S		X	X	X	X	X	64C08
3		1314V3-06-B10 (6-11)	12-7-16	1015	2 S		X	X	X	X	X	
4		1314V3-06-B11 (0-6)	12-7-16	1040	2 S		X	X	X	X	X	
5		1314V3-06-B11 (6-10.7)	12-7-16	1045	2 S		X	X	X	X	X	
6		1314V3-06-E710	12-7-16	1105	6 W		X	X	X			
7		1314V3-00-T1302	-	-	2 W		X					
12-7-16												

- 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): 10 Days 1 Day 2 Days 5 Days 7 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>12/7/16</u>	Time: <u>1700</u>	Received By: <u>[Signature]</u>	Company: <u>FA-CAT</u>	Date: <u>12/8/16</u>	Time: <u>0900</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: 500-121163-2

Login Number: 121163

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
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	



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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121261-3
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 3:26:58 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

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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

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Case Narrative

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

TestAmerica Job ID: 500-121261-3

Job ID: 500-121261-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121261-3

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

Method(s) 8260B: Surrogate recovery and/or Internal standard responses were outside of acceptance limits for the following samples: 1314V3-06-B01 (0-8) (500-121261-13). Compounds associated with these internal standards have been flagged with a "" in the data package. Re-analysis was performed twice with Internal standard responses and surrogate recoveries outside QC limits. The best data were reported.

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

GC/MS Semi VOA

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

GC Semi VOA

Method(s) 8082A: The following sample required a mercury clean-up, via EPA Method 3660A, to reduce matrix interferences caused by sulfur: 1314V3-06-B01 (0-8) (500-121261-13). The reagent lot number used was: 153166.

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

Metals

Method(s) 6010B: The following sample was diluted due to the nature of the sample matrix: 1314V3-06-B01 (0-8) (500-121261-13) and 1314V3-06-B02 (0-8) (500-121261-14). Elevated reporting limits (RLs) are provided.

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: 500-121261-3

Client Sample ID: 1314V3-06-B03 (0-4)

Lab Sample ID: 500-121261-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.014	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.033	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.028	J	0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.014	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.016	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.031	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	0.019	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.7		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	2.2	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	6.9		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	480		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.62		0.56	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	27		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.98		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0029	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.81		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.057	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J B	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: 500-121261-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121261-15	1314V3-06-B03 (0-4)	Solid	12/08/16 12:20	12/09/16 10:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Client Sample Results

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

TestAmerica Job ID: 500-121261-3

Client Sample ID: 1314V3-06-B03 (0-4)

Lab Sample ID: 500-121261-15

Date Collected: 12/08/16 12:20

Matrix: Solid

Date Received: 12/09/16 10:00

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	☼	12/09/16 17:53	12/11/16 17:22	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/09/16 17:53	12/11/16 17:22	1
Dibromofluoromethane	99		75 - 120	12/09/16 17:53	12/11/16 17:22	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/09/16 17:53	12/11/16 17:22	1
Toluene-d8 (Surr)	103		75 - 123	12/09/16 17:53	12/11/16 17:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-3

Client Sample ID: 1314V3-06-B03 (0-4)

Lab Sample ID: 500-121261-15

Date Collected: 12/08/16 12:20

Matrix: Solid

Date Received: 12/09/16 10:00

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	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Phenanthrene	0.014	J	0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Fluoranthene	0.033	J	0.038	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Pyrene	0.028	J	0.038	0.0077	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Benzo[a]anthracene	0.014	J	0.038	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-3

Client Sample ID: 1314V3-06-B03 (0-4)

Lab Sample ID: 500-121261-15

Date Collected: 12/08/16 12:20

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.016	J	0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Benzo[b]fluoranthene	0.031	J	0.038	0.0083	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Benzo[k]fluoranthene	0.014	J	0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Benzo[a]pyrene	0.019	J	0.038	0.0075	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	93		40 - 130	12/19/16 16:12	12/20/16 16:04	1
Phenol-d5	91		36 - 123	12/19/16 16:12	12/20/16 16:04	1
Nitrobenzene-d5	81		33 - 124	12/19/16 16:12	12/20/16 16:04	1
2-Fluorobiphenyl	79		42 - 115	12/19/16 16:12	12/20/16 16:04	1
2,4,6-Tribromophenol	63		25 - 130	12/19/16 16:12	12/20/16 16:04	1
Terphenyl-d14	103		25 - 150	12/19/16 16:12	12/20/16 16:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.25	J	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Arsenic	4.7		0.56	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Barium	70		0.56	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Beryllium	0.48		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Boron	2.2	J	2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Cadmium	0.21		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Calcium	30000	B	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Chromium	13	B	0.56	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Cobalt	5.3		0.28	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Copper	11		0.56	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Iron	13000		11	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Lead	6.9		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Magnesium	17000		5.6	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Manganese	290		0.56	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Nickel	16		0.56	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Potassium	480		28	4.6	mg/Kg	☼	12/14/16 15:50	12/18/16 20:52	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Sodium	120		56	7.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Thallium	0.62		0.56	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Vanadium	23		0.28	0.081	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
Zinc	27		1.1	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.98		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:36	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-3

Client Sample ID: 1314V3-06-B03 (0-4)

Lab Sample ID: 500-121261-15

Date Collected: 12/08/16 12:20

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 85.6

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	12/16/16 00:36	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/19/16 08:53	12/19/16 22:55	1
Manganese	0.81		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
Nickel	0.021	J	0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
Zinc	0.057	J	0.50	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 06:29	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	-	12/15/16 08:57	12/15/16 19:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 19:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 11:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J B	0.017	0.0089	mg/Kg	☼	12/14/16 16:00	12/15/16 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/14/16 16:00	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121261-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits

GC/MS Semi VOA

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

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: 500-121261-3

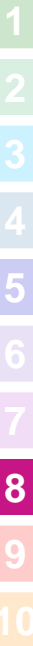
Laboratory: TestAmerica Chicago

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 #: 500-121261
 Chain of Custody Number: ED46-29
 Page _____ of _____
 Temperature °C of Cooler: _____

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 #		Sampling		# of Containers	Matrix	VOC	SVOC	Total TAC Metals	Transition TAC Metals	Pb/Zn Solids	PCB	Comments
F74		52012744		Date	Time									
Project Location/State		Lab PM												
Port Island County, IL		D. Wright												
Sampler														
S. Cooper														
13	MS/MSD	1314V3-06-001 (0-8)	12-8-16	1120	2	S	X	X	X	X	X	X	64 COB	
14	MS/MSD	1314V3-06-002 (0-8)	12-8-16	1150	2	S	X	X	X	X	X	X		
15	MS/MSD	1314V3-06-003 (0-4)	12-8-16	1220	2	S	X	X	X	X	X	X		
12-8-16														

Turnaround Time Required (Business Days): 10 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: EE	Date: 12-8-16	Time: 1100	Received By: <u>[Signature]</u>	Company: TA-CAPL	Date: 12/9/16	Time: 1000	Lab Courier: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____	Shipped: <u>FedEx</u>
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
 - WL - Wipes
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-121261-3

Login Number: 121261

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	3.6,3.8
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121303-1
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:
12/27/2016 1:13:32 PM

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.

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Case Narrative

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

TestAmerica Job ID: 500-121303-1

Job ID: 500-121303-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121303-1

Comments

No additional comments.

Receipt

The samples were received on 12/10/2016 7:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° 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. (500-121303-E-2-I MS) and (500-121303-E-2-J MSD)

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 500-366006 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-366006/2-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 500-365093 and 500-365312 contained Lead above the reporting limit (RL). The samples 1314V3-05-B02 (0-6) (500-121303-1), 1314V3-05-B02 (6-10.6) (500-121303-2), 1314V3-05-B01 (0-5) (500-121303-4) and (500-121303-E-13-F) 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: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.0058	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.053		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.010	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.084		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.086		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.042		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.047		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.058		0.038	0.0083	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	0.041		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.024	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.032	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J F1	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.4		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	81	F1	0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	4.6	F1	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30	B	0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	27000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		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	12000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	430		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	980	F1	28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J B F1	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	67	F1	1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.99		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.065		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.5		0.61	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	110		0.61	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7	J	3.0	0.43	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.093	J B	0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	4300	B	12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.61	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: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6) (Continued)

Lab Sample ID: 500-121303-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	9.1		0.30	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.61	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	4.7	mg/Kg	1	☼	6010B	Total/NA
Lead	9.8		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3200		6.1	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	160		0.61	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	910		30	5.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		61	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.30	0.089	mg/Kg	1	☼	6010B	Total/NA
Zinc	70		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.52		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.044		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.0		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: 500-121303-1



Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.026	J	0.036	0.0050	mg/Kg	1	*	*	8270D	Total/NA
Fluoranthene	0.053		0.036	0.0067	mg/Kg	1	*	*	8270D	Total/NA
Pyrene	0.045		0.036	0.0072	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]anthracene	0.024	J	0.036	0.0049	mg/Kg	1	*	*	8270D	Total/NA
Chrysene	0.030	J	0.036	0.0099	mg/Kg	1	*	*	8270D	Total/NA
Benzo[b]fluoranthene	0.036		0.036	0.0078	mg/Kg	1	*	*	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.036	0.011	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.036	0.0070	mg/Kg	1	*	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.013	J	0.036	0.0094	mg/Kg	1	*	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.036	0.012	mg/Kg	1	*	*	8270D	Total/NA
Antimony	0.30	J	1.1	0.22	mg/Kg	1	*	*	6010B	Total/NA
Arsenic	5.6		0.54	0.25	mg/Kg	1	*	*	6010B	Total/NA
Barium	64		0.54	0.099	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.54		0.22	0.047	mg/Kg	1	*	*	6010B	Total/NA
Boron	2.0	J	2.7	0.38	mg/Kg	1	*	*	6010B	Total/NA
Cadmium	0.13	B	0.11	0.031	mg/Kg	1	*	*	6010B	Total/NA
Calcium	30000	B	11	3.5	mg/Kg	1	*	*	6010B	Total/NA
Chromium	11		0.54	0.093	mg/Kg	1	*	*	6010B	Total/NA
Cobalt	9.9		0.27	0.061	mg/Kg	1	*	*	6010B	Total/NA
Copper	11		0.54	0.12	mg/Kg	1	*	*	6010B	Total/NA
Iron	19000	B	11	4.2	mg/Kg	1	*	*	6010B	Total/NA
Lead	13		0.27	0.13	mg/Kg	1	*	*	6010B	Total/NA
Magnesium	14000		5.4	2.2	mg/Kg	1	*	*	6010B	Total/NA
Manganese	640		0.54	0.11	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: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5) (Continued)

Lab Sample ID: 500-121303-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	20		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	550		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.28	J B	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	83		54	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.27	0.079	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	3.0		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.013	J	0.018	0.0092	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		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: 500-121303-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121303-1	1314V3-05-B02 (0-6)	Solid	12/09/16 08:25	12/10/16 07:15
500-121303-2	1314V3-05-B02 (6-10.6)	Solid	12/09/16 08:30	12/10/16 07:15
500-121303-4	1314V3-05-B01 (0-5)	Solid	12/09/16 10:20	12/10/16 07:15

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Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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	☼	12/10/16 08:55	12/12/16 19:20	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 120	12/10/16 08:55	12/12/16 19:20	1
Dibromofluoromethane	119		75 - 120	12/10/16 08:55	12/12/16 19:20	1
1,2-Dichloroethane-d4 (Surr)	125		69 - 134	12/10/16 08:55	12/12/16 19:20	1
Toluene-d8 (Surr)	108		75 - 123	12/10/16 08:55	12/12/16 19:20	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	☼	12/20/16 16:13	12/21/16 12:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Acenaphthylene	0.0058	J	0.038	0.0051	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Phenanthrene	0.053		0.038	0.0054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Anthracene	0.010	J	0.038	0.0064	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Fluoranthene	0.084		0.038	0.0071	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Pyrene	0.086		0.038	0.0077	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[a]anthracene	0.042		0.038	0.0052	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.047		0.038	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[b]fluoranthene	0.058		0.038	0.0083	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[k]fluoranthene	0.018 J		0.038	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[a]pyrene	0.041		0.038	0.0075	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Indeno[1,2,3-cd]pyrene	0.024 J		0.038	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
Benzo[g,h,i]perylene	0.032 J		0.038	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/20/16 16:13	12/21/16 12:08	1
Phenol-d5	87		36 - 123	12/20/16 16:13	12/21/16 12:08	1
Nitrobenzene-d5	90		33 - 124	12/20/16 16:13	12/21/16 12:08	1
2-Fluorobiphenyl	91		42 - 115	12/20/16 16:13	12/21/16 12:08	1
2,4,6-Tribromophenol	83		25 - 130	12/20/16 16:13	12/21/16 12:08	1
Terphenyl-d14	102		25 - 150	12/20/16 16:13	12/21/16 12:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28 J F1		1.1	0.23	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Arsenic	4.4		0.55	0.26	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Barium	81 F1		0.55	0.10	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Beryllium	0.46		0.22	0.048	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Boron	4.6 F1		2.8	0.39	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Cadmium	0.30 B		0.11	0.032	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Calcium	27000 B		11	3.6	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Chromium	11		0.55	0.095	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Cobalt	7.9		0.28	0.063	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Copper	12		0.55	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Iron	12000 B		11	4.3	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Lead	23		0.28	0.14	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Magnesium	11000		5.5	2.2	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Manganese	430		0.55	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Nickel	15		0.55	0.15	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Potassium	980 F1		28	4.5	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Selenium	0.35 J B F1		0.55	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Sodium	120		55	7.3	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Thallium	<0.55 F1		0.55	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Vanadium	17		0.28	0.081	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1
Zinc	67 F1		1.1	0.35	mg/Kg	☼	12/15/16 09:32	12/15/16 17:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45 J		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 15:31	1
Boron	0.12 J		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:31	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (0-6)

Lab Sample ID: 500-121303-1

Date Collected: 12/09/16 08:25

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/15/16 15:03	12/20/16 15:31	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 15:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 15:31	1
Manganese	0.99		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 15:31	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:31	1
Zinc	0.076	J	0.50	0.020	mg/L		12/15/16 15:03	12/20/16 15:31	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		12/15/16 14:57	12/19/16 20:05	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		12/15/16 15:03	12/16/16 17:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 17:32	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		12/15/16 13:00	12/16/16 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065		0.018	0.0094	mg/Kg	☼	12/15/16 17:00	12/16/16 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/16/16 15:44	1

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/10/16 08:55	12/12/16 19:46	1
Dibromofluoromethane	120		75 - 120	12/10/16 08:55	12/12/16 19:46	1
1,2-Dichloroethane-d4 (Surr)	132		69 - 134	12/10/16 08:55	12/12/16 19:46	1
Toluene-d8 (Surr)	107		75 - 123	12/10/16 08:55	12/12/16 19:46	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	☼	12/20/16 16:13	12/21/16 12:36	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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	0.048	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachlorocyclopentadiene	<0.81	F1	0.81	0.23	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dinitrophenol	<0.81	F1 *	0.81	0.71	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Nitrophenol	<0.81	F2	0.81	0.38	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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	☼	12/20/16 16:13	12/21/16 12:36	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Indeno[1,2,3-cd]pyrene	<0.040	F1	0.040	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Dibenz(a,h)anthracene	<0.040	F1	0.040	0.0078	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
Benzo[g,h,i]perylene	<0.040	F1	0.040	0.013	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/20/16 16:13	12/21/16 12:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/20/16 16:13	12/21/16 12:36	1
Phenol-d5	71		36 - 123	12/20/16 16:13	12/21/16 12:36	1
Nitrobenzene-d5	88		33 - 124	12/20/16 16:13	12/21/16 12:36	1
2-Fluorobiphenyl	89		42 - 115	12/20/16 16:13	12/21/16 12:36	1
2,4,6-Tribromophenol	89		25 - 130	12/20/16 16:13	12/21/16 12:36	1
Terphenyl-d14	107		25 - 150	12/20/16 16:13	12/21/16 12:36	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	☼	12/15/16 09:32	12/15/16 17:58	1
Arsenic	9.5		0.61	0.28	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Barium	110		0.61	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Beryllium	0.50		0.24	0.053	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Boron	2.7	J	3.0	0.43	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Cadmium	0.093	J B	0.12	0.035	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Calcium	4300	B	12	3.9	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Chromium	14		0.61	0.10	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Cobalt	9.1		0.30	0.069	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Copper	13		0.61	0.13	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Iron	19000	B	12	4.7	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Lead	9.8		0.30	0.15	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Magnesium	3200		6.1	2.5	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Manganese	160		0.61	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Nickel	20		0.61	0.17	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Potassium	910		30	5.0	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Selenium	0.34	J B	0.61	0.30	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Sodium	140		61	8.0	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Vanadium	26		0.30	0.089	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	1
Zinc	70		1.2	0.39	mg/Kg	☼	12/15/16 09:32	12/15/16 17:58	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		12/15/16 15:03	12/20/16 15:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 15:38	1
Boron	0.074	J	0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:38	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B02 (6-10.6)

Lab Sample ID: 500-121303-2

Date Collected: 12/09/16 08:30

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 79.1

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		12/15/16 15:03	12/20/16 15:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 15:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 15:38	1
Manganese	1.4		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Nickel	0.019	J	0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 15:38	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:38	1
Zinc	<0.50		0.50	0.020	mg/L		12/15/16 15:03	12/20/16 15:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.52		0.025	0.010	mg/L		12/15/16 14:57	12/19/16 20:12	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		12/15/16 15:03	12/16/16 17:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 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		12/15/16 13:00	12/16/16 09:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.020	0.011	mg/Kg	☼	12/15/16 17:00	12/16/16 09:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.0		0.2	0.2	SU			12/16/16 15:46	1

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/10/16 08:55	12/12/16 20:38	1
Dibromofluoromethane	119		75 - 120	12/10/16 08:55	12/12/16 20:38	1
1,2-Dichloroethane-d4 (Surr)	127		69 - 134	12/10/16 08:55	12/12/16 20:38	1
Toluene-d8 (Surr)	109		75 - 123	12/10/16 08:55	12/12/16 20:38	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	☼	12/20/16 16:13	12/21/16 13:04	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Phenanthrene	0.026	J	0.036	0.0050	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Fluoranthene	0.053		0.036	0.0067	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Pyrene	0.045		0.036	0.0072	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[a]anthracene	0.024	J	0.036	0.0049	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.030	J	0.036	0.0099	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[b]fluoranthene	0.036		0.036	0.0078	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[k]fluoranthene	0.015	J	0.036	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[a]pyrene	0.024	J	0.036	0.0070	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Indeno[1,2,3-cd]pyrene	0.013	J	0.036	0.0094	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
Benzo[g,h,i]perylene	0.016	J	0.036	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		40 - 130	12/20/16 16:13	12/21/16 13:04	1
Phenol-d5	83		36 - 123	12/20/16 16:13	12/21/16 13:04	1
Nitrobenzene-d5	87		33 - 124	12/20/16 16:13	12/21/16 13:04	1
2-Fluorobiphenyl	88		42 - 115	12/20/16 16:13	12/21/16 13:04	1
2,4,6-Tribromophenol	82		25 - 130	12/20/16 16:13	12/21/16 13:04	1
Terphenyl-d14	104		25 - 150	12/20/16 16:13	12/21/16 13:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.22	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Arsenic	5.6		0.54	0.25	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Barium	64		0.54	0.099	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Beryllium	0.54		0.22	0.047	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Boron	2.0	J	2.7	0.38	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Cadmium	0.13	B	0.11	0.031	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Calcium	30000	B	11	3.5	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Chromium	11		0.54	0.093	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Cobalt	9.9		0.27	0.061	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Copper	11		0.54	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Iron	19000	B	11	4.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Lead	13		0.27	0.13	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Magnesium	14000		5.4	2.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Manganese	640		0.54	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Nickel	20		0.54	0.15	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Potassium	550		27	4.4	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Selenium	0.28	J B	0.54	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Sodium	83		54	7.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Vanadium	21		0.27	0.079	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	1
Zinc	43		1.1	0.34	mg/Kg	☼	12/15/16 09:32	12/15/16 18:14	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		12/15/16 15:03	12/20/16 15:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 15:51	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:51	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-1

Client Sample ID: 1314V3-05-B01 (0-5)

Lab Sample ID: 500-121303-4

Date Collected: 12/09/16 10:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 91.1

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		12/15/16 15:03	12/20/16 15:51	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 15:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 15:51	1
Manganese	3.0		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 15:51	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 15:51	1
Zinc	<0.50		0.50	0.020	mg/L		12/15/16 15:03	12/20/16 15:51	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		12/15/16 14:57	12/19/16 20:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/15/16 15:03	12/16/16 17:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 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		12/15/16 13:00	12/16/16 09:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.018	0.0092	mg/Kg	☼	12/15/16 17:00	12/16/16 10:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/16/16 15:52	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121303-1

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
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: 500-121303-1

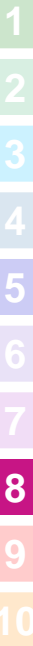
Laboratory: TestAmerica Chicago

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 ENVIRONMENT

2417 Bond Street, University Park, IL
Phone: 708.534.5200 Fax: 708.1



500-121303 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 #: 500-121303
Chain of Custody Number: EE4632
Page _____ of _____
Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter					Preservative Key	
Project Name		Lab Project #		Matrix								
Project Location/State		Lab PM									Comments	
Sample #												
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total PAH	Metals	TCAP/SPAP	PAH/PA
1		1314V3-05-B02 (0-6)	12-9-16	0825	2 S	S	X	X	X	X	X	
2		1314V3-05-B02 (6-10.6)	12-9-16	0830	2 S	S	X	X	X	X	X	64C08
3		1314V3-05-B03 (0-5.9)	12-9-16	0845	2 S	S	X	X	X	X	X	
4		1314V3-05-B01 (0-5)	12-9-16	1020	2 S	S	X	X	X	X	X	
12-9-16												

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: <u>EE</u> Company: <u>TA</u> Date: <u>12-9-16</u> Time: <u>1530</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/9/16</u> Time: <u>1530</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/9/16</u> Time: <u>1800</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/10/16</u> Time: <u>0715</u>
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: 500-121303-1

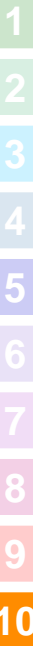
Login Number: 121303

List Source: TestAmerica Chicago

List Number: 1

Creator: James, Jeff A

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	4.0
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	



TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121429-2
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:
12/29/2016 2:47:39 PM

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.

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Case Narrative

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

TestAmerica Job ID: 500-121429-2

Job ID: 500-121429-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121429-2

Comments

No additional comments.

Receipt

The samples were received on 12/14/2016 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 2.0° C and 4.9° C.

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following samples was outside the upper control limit: 1314V3-06-B09 (0-2) (500-121429-12) and 1314V3-06-B06 (0-4) (500-121429-14). The samples 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: The following sample was diluted due to the nature of the sample matrix: 1314V3-06-B09 (0-2) (500-121429-12). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following samples contained one base/neutral surrogate outside acceptance limits: 1314V3-06-B09 (0-2) (500-121429-12), (500-121429-E-1-P), (500-121429-E-1-Q MS) and (500-121429-E-1-R MSD). 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 matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121429-E-1-Q MS) and (500-121429-E-1-R MSD)

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

GC Semi VOA

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

Metals

Method(s) 6010B: The following sample was diluted due to the nature of the sample matrix: 1314V3-06-B09 (0-2) (500-121429-12) and 1314V3-06-B07 (0-4.3) (500-121429-17). Elevated reporting limits (RLs) are provided.

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: 500-121429-2

Client Sample ID: 1314V3-06-B04 (0-5.2)

Lab Sample ID: 500-121429-11

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	0.020	J	0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.011	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.019	J	0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.015	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.28		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.057		0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.51		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.45		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.23		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.25		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.40		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.13		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.24		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.099		0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.030	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.096		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
PCB-1254	0.039		0.018	0.0039	mg/Kg	1	☼	8082A	Total/NA
PCB-1260	0.021		0.018	0.0089	mg/Kg	1	☼	8082A	Total/NA
Arsenic	4.3		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	73		0.53	0.096	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	4.4		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.42		0.11	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	43000		53	17	mg/Kg	5	☼	6010B	Total/NA
Chromium	16	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.1		0.26	0.059	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	83		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	610		26	4.3	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		53	6.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	98		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.062	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.042	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.29		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.045		0.016	0.0084	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-06-B09 (0-2)

Lab Sample ID: 500-121429-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.48		0.19	0.029	mg/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	0.66		0.38	0.035	mg/Kg	5	☼	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: 500-121429-2

Client Sample ID: 1314V3-06-B09 (0-2) (Continued)

Lab Sample ID: 500-121429-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.030	J	0.19	0.025	mg/Kg	5	☼	8270D	Total/NA
Acenaphthene	0.042	J	0.19	0.034	mg/Kg	5	☼	8270D	Total/NA
Dibenzofuran	0.23	J	0.95	0.22	mg/Kg	5	☼	8270D	Total/NA
Fluorene	0.028	J	0.19	0.026	mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	0.85		0.19	0.026	mg/Kg	5	☼	8270D	Total/NA
Anthracene	0.074	J	0.19	0.031	mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	0.68		0.19	0.035	mg/Kg	5	☼	8270D	Total/NA
Pyrene	1.2		0.19	0.037	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	0.50		0.19	0.025	mg/Kg	5	☼	8270D	Total/NA
Chrysene	0.58		0.19	0.051	mg/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1.2		0.19	0.041	mg/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.40		0.19	0.055	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	0.73		0.19	0.036	mg/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.34		0.19	0.049	mg/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.069	J	0.19	0.036	mg/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.29		0.19	0.061	mg/Kg	5	☼	8270D	Total/NA
Arsenic	5.7		2.8	1.3	mg/Kg	5	☼	6010B	Total/NA
Barium	60		2.8	0.51	mg/Kg	5	☼	6010B	Total/NA
Beryllium	0.53	J	1.1	0.24	mg/Kg	5	☼	6010B	Total/NA
Boron	6.5	J	14	1.9	mg/Kg	5	☼	6010B	Total/NA
Cadmium	0.44	J	0.55	0.16	mg/Kg	5	☼	6010B	Total/NA
Calcium	23000		55	18	mg/Kg	5	☼	6010B	Total/NA
Chromium	21	B	2.8	0.48	mg/Kg	5	☼	6010B	Total/NA
Cobalt	3.3		1.4	0.31	mg/Kg	5	☼	6010B	Total/NA
Copper	20		2.8	0.60	mg/Kg	5	☼	6010B	Total/NA
Iron	17000		55	21	mg/Kg	5	☼	6010B	Total/NA
Lead	39		1.4	0.69	mg/Kg	5	☼	6010B	Total/NA
Magnesium	4000		28	11	mg/Kg	5	☼	6010B	Total/NA
Manganese	440		2.8	0.55	mg/Kg	5	☼	6010B	Total/NA
Nickel	49		2.8	0.75	mg/Kg	5	☼	6010B	Total/NA
Potassium	610		140	23	mg/Kg	5	☼	6010B	Total/NA
Silver	0.81	J	1.4	0.32	mg/Kg	5	☼	6010B	Total/NA
Sodium	140	J	280	36	mg/Kg	5	☼	6010B	Total/NA
Vanadium	45		1.4	0.40	mg/Kg	5	☼	6010B	Total/NA
Zinc	72		5.5	1.7	mg/Kg	5	☼	6010B	Total/NA
Barium	0.26	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.92		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.050		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.046		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-06-B05 (0-8)

Lab Sample ID: 500-121429-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.097		0.038	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.12		0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0075	J	0.038	0.0054	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: 500-121429-2

Client Sample ID: 1314V3-06-B05 (0-8) (Continued)

Lab Sample ID: 500-121429-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.13		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0073	J	0.038	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.096		0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.072		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.052		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.083		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.12		0.038	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.037	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.067		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.045		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.016	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.049		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.4		0.49	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	75		0.49	0.090	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	5.6		2.5	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26		0.099	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	3800		9.9	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.49	0.085	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.49	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		9.9	3.8	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1300		4.9	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.49	0.098	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.49	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		25	4.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		49	6.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.25	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	66		0.99	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.17	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.034		0.025	0.010	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	0.21	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.44		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.16		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-06-B06 (0-4)

Lab Sample ID: 500-121429-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.21		0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.36		0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0096	J	0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.020	J	0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.17	J	0.19	0.045	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.016	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.35		0.038	0.0053	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: 500-121429-2

Client Sample ID: 1314V3-06-B06 (0-4) (Continued)

Lab Sample ID: 500-121429-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.040		0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.35		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.41		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.22		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.29		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.58		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.21		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.34		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.047		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.15		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
3 & 4 Methylphenol	0.47		0.19	0.064	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.42	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.6		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.30		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	5.6		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.4		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	27000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	42	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.9		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	86		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	29000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	230		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3800		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	510		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	68		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	550		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Silver	0.46		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	200		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.25	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.076	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.013	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.059		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		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: 500-121429-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121429-11	1314V3-06-B04 (0-5.2)	Solid	12/13/16 11:45	12/14/16 10:30
500-121429-12	1314V3-06-B09 (0-2)	Solid	12/13/16 12:05	12/14/16 10:30
500-121429-13	1314V3-06-B05 (0-8)	Solid	12/13/16 12:25	12/14/16 10:30
500-121429-14	1314V3-06-B06 (0-4)	Solid	12/13/16 12:55	12/14/16 10:30

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Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B04 (0-5.2)

Lab Sample ID: 500-121429-11

Date Collected: 12/13/16 11:45

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 89.8

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	☼	12/14/16 15:00	12/15/16 17:20	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,1,1,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/14/16 15:00	12/15/16 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 120	12/14/16 15:00	12/15/16 17:20	1
Dibromofluoromethane	97		75 - 120	12/14/16 15:00	12/15/16 17:20	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/14/16 15:00	12/15/16 17:20	1
Toluene-d8 (Surr)	104		75 - 123	12/14/16 15:00	12/15/16 17:20	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	☼	12/22/16 15:26	12/23/16 18:13	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B04 (0-5.2)

Lab Sample ID: 500-121429-11

Date Collected: 12/13/16 11:45

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 89.8

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	0.044	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Naphthalene	0.017	J	0.036	0.0056	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2-Methylnaphthalene	0.020	J	0.074	0.0067	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Acenaphthylene	0.011	J	0.036	0.0048	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Acenaphthene	0.019	J	0.036	0.0066	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Fluorene	0.015	J	0.036	0.0051	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Phenanthrene	0.28		0.036	0.0051	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Anthracene	0.057		0.036	0.0061	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Fluoranthene	0.51		0.036	0.0068	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Pyrene	0.45		0.036	0.0073	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Benzo[a]anthracene	0.23		0.036	0.0049	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B04 (0-5.2)

Lab Sample ID: 500-121429-11

Date Collected: 12/13/16 11:45

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.25		0.036	0.010	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Benzo[b]fluoranthene	0.40		0.036	0.0079	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Benzo[k]fluoranthene	0.13		0.036	0.011	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Benzo[a]pyrene	0.24		0.036	0.0071	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Indeno[1,2,3-cd]pyrene	0.099		0.036	0.0095	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Dibenz(a,h)anthracene	0.030	J	0.036	0.0071	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
Benzo[g,h,i]perylene	0.096		0.036	0.012	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/22/16 15:26	12/23/16 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/22/16 15:26	12/23/16 18:13	1
Phenol-d5	87		36 - 123	12/22/16 15:26	12/23/16 18:13	1
Nitrobenzene-d5	75		33 - 124	12/22/16 15:26	12/23/16 18:13	1
2-Fluorobiphenyl	76		42 - 115	12/22/16 15:26	12/23/16 18:13	1
2,4,6-Tribromophenol	88		25 - 130	12/22/16 15:26	12/23/16 18:13	1
Terphenyl-d14	100		25 - 150	12/22/16 15:26	12/23/16 18:13	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.018		0.018	0.0064	mg/Kg	☼	12/14/16 16:07	12/15/16 10:43	1
PCB-1221	<0.018		0.018	0.0080	mg/Kg	☼	12/14/16 16:07	12/15/16 10:43	1
PCB-1232	<0.018		0.018	0.0079	mg/Kg	☼	12/14/16 16:07	12/15/16 10:43	1
PCB-1242	<0.018		0.018	0.0060	mg/Kg	☼	12/14/16 16:07	12/15/16 10:43	1
PCB-1248	<0.018		0.018	0.0072	mg/Kg	☼	12/14/16 16:07	12/15/16 10:43	1
PCB-1254	0.039		0.018	0.0039	mg/Kg	☼	12/14/16 16:07	12/15/16 10:43	1
PCB-1260	0.021		0.018	0.0089	mg/Kg	☼	12/14/16 16:07	12/15/16 10:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		41 - 124	12/14/16 16:07	12/15/16 10:43	1
DCB Decachlorobiphenyl	101		47 - 127	12/14/16 16:07	12/15/16 10:43	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	☼	12/21/16 08:24	12/22/16 19:11	1
Arsenic	4.3		0.53	0.24	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Barium	73		0.53	0.096	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Beryllium	0.41		0.21	0.046	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Boron	4.4		2.6	0.37	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Cadmium	0.42		0.11	0.030	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Calcium	43000		53	17	mg/Kg	☼	12/21/16 08:24	12/22/16 19:15	5
Chromium	16	B	0.53	0.091	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Cobalt	7.1		0.26	0.059	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Copper	15		0.53	0.11	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Iron	13000		11	4.1	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Lead	83		0.26	0.13	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Magnesium	13000		5.3	2.1	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Manganese	390		0.53	0.10	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B04 (0-5.2)

Lab Sample ID: 500-121429-11

Date Collected: 12/13/16 11:45

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	17		0.53	0.14	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Potassium	610		26	4.3	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Selenium	<0.53		0.53	0.26	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Sodium	160		53	6.9	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Vanadium	18		0.26	0.077	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1
Zinc	98		1.1	0.33	mg/Kg	☼	12/21/16 08:24	12/22/16 19:11	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		12/20/16 14:37	12/21/16 21:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/20/16 14:37	12/21/16 21:23	1
Boron	0.062	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 21:23	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/20/16 14:37	12/21/16 21:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:23	1
Cobalt	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:23	1
Iron	<0.40		0.40	0.20	mg/L		12/20/16 14:37	12/21/16 21:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/20/16 14:37	12/21/16 21:23	1
Manganese	1.6		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:23	1
Nickel	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:23	1
Selenium	<0.050		0.050	0.020	mg/L		12/20/16 14:37	12/21/16 21:23	1
Silver	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:23	1
Zinc	0.042	J B	0.50	0.020	mg/L		12/20/16 14:37	12/21/16 21:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.29		0.025	0.010	mg/L		12/20/16 14:34	12/22/16 04:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/20/16 14:37	12/21/16 12:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/20/16 14:37	12/21/16 12:28	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/20/16 14:00	12/21/16 11:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.016	0.0084	mg/Kg	☼	12/20/16 07:00	12/20/16 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/21/16 12:41	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B09 (0-2)

Lab Sample ID: 500-121429-12

Date Collected: 12/13/16 12:05

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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	☼	12/14/16 15:00	12/15/16 17:45	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Carbon disulfide	<0.0046		0.0046	0.00097	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,2-Dichloroethane	<0.0046		0.0046	0.0015	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
2-Hexanone	<0.0046		0.0046	0.0015	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,1,1,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/14/16 15:00	12/15/16 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129	X	70 - 120	12/14/16 15:00	12/15/16 17:45	1
Dibromofluoromethane	97		75 - 120	12/14/16 15:00	12/15/16 17:45	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/14/16 15:00	12/15/16 17:45	1
Toluene-d8 (Surr)	114		75 - 123	12/14/16 15:00	12/15/16 17:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.95		0.95	0.42	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Bis(2-chloroethyl)ether	<0.95		0.95	0.28	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
1,3-Dichlorobenzene	<0.95		0.95	0.21	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
1,4-Dichlorobenzene	<0.95		0.95	0.24	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B09 (0-2)

Lab Sample ID: 500-121429-12

Date Collected: 12/13/16 12:05

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.95		0.95	0.22	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2-Methylphenol	<0.95		0.95	0.30	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,2'-oxybis[1-chloropropane]	<0.95		0.95	0.22	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
N-Nitrosodi-n-propylamine	<0.38		0.38	0.23	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Hexachloroethane	<0.95		0.95	0.29	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2-Chlorophenol	<0.95		0.95	0.32	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Nitrobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Bis(2-chloroethoxy)methane	<0.95		0.95	0.19	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
1,2,4-Trichlorobenzene	<0.95		0.95	0.20	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Isophorone	<0.95		0.95	0.21	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,4-Dimethylphenol	<1.9		1.9	0.71	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Hexachlorobutadiene	<0.95		0.95	0.30	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Naphthalene	0.48		0.19	0.029	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,4-Dichlorophenol	<1.9		1.9	0.45	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
4-Chloroaniline	<3.8		3.8	0.88	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,4,6-Trichlorophenol	<1.9		1.9	0.65	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,4,5-Trichlorophenol	<1.9		1.9	0.43	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Hexachlorocyclopentadiene	<3.8		3.8	1.1	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2-Methylnaphthalene	0.66		0.38	0.035	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2-Nitroaniline	<0.95		0.95	0.25	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2-Chloronaphthalene	<0.95		0.95	0.21	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
4-Chloro-3-methylphenol	<1.9		1.9	0.64	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,6-Dinitrotoluene	<0.95		0.95	0.37	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2-Nitrophenol	<1.9		1.9	0.44	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
3-Nitroaniline	<1.9		1.9	0.58	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Dimethyl phthalate	<0.95		0.95	0.25	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,4-Dinitrophenol	<3.8		3.8	3.3	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Acenaphthylene	0.030 J		0.19	0.025	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
2,4-Dinitrotoluene	<0.95		0.95	0.30	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Acenaphthene	0.042 J		0.19	0.034	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Dibenzofuran	0.23 J		0.95	0.22	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
4-Nitrophenol	<3.8		3.8	1.8	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Fluorene	0.028 J		0.19	0.026	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
4-Nitroaniline	<1.9		1.9	0.79	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
4-Bromophenyl phenyl ether	<0.95		0.95	0.25	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Hexachlorobenzene	<0.38		0.38	0.044	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Diethyl phthalate	<0.95		0.95	0.32	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
4-Chlorophenyl phenyl ether	<0.95		0.95	0.22	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Pentachlorophenol	<3.8		3.8	3.0	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
N-Nitrosodiphenylamine	<0.95		0.95	0.22	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
4,6-Dinitro-2-methylphenol	<3.8		3.8	1.5	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Phenanthrene	0.85		0.19	0.026	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Anthracene	0.074 J		0.19	0.031	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Carbazole	<0.95		0.95	0.47	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Di-n-butyl phthalate	<0.95		0.95	0.29	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Fluoranthene	0.68		0.19	0.035	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Pyrene	1.2		0.19	0.037	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Butyl benzyl phthalate	<0.95		0.95	0.36	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Benzo[a]anthracene	0.50		0.19	0.025	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B09 (0-2)

Lab Sample ID: 500-121429-12

Date Collected: 12/13/16 12:05

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.58		0.19	0.051	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
3,3'-Dichlorobenzidine	<0.95		0.95	0.26	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Bis(2-ethylhexyl) phthalate	<0.95		0.95	0.34	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Di-n-octyl phthalate	<0.95		0.95	0.31	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Benzo[b]fluoranthene	1.2		0.19	0.041	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Benzo[k]fluoranthene	0.40		0.19	0.055	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Benzo[a]pyrene	0.73		0.19	0.036	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Indeno[1,2,3-cd]pyrene	0.34		0.19	0.049	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Dibenz(a,h)anthracene	0.069	J	0.19	0.036	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
Benzo[g,h,i]perylene	0.29		0.19	0.061	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5
3 & 4 Methylphenol	<0.95		0.95	0.31	mg/Kg	☼	12/22/16 15:26	12/27/16 17:32	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		40 - 130	12/22/16 15:26	12/27/16 17:32	5
Phenol-d5	121		36 - 123	12/22/16 15:26	12/27/16 17:32	5
Nitrobenzene-d5	109		33 - 124	12/22/16 15:26	12/27/16 17:32	5
2-Fluorobiphenyl	102		42 - 115	12/22/16 15:26	12/27/16 17:32	5
2,4,6-Tribromophenol	83		25 - 130	12/22/16 15:26	12/27/16 17:32	5
Terphenyl-d14	210	X	25 - 150	12/22/16 15:26	12/27/16 17:32	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<5.5		5.5	1.1	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Arsenic	5.7		2.8	1.3	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Barium	60		2.8	0.51	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Beryllium	0.53	J	1.1	0.24	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Boron	6.5	J	14	1.9	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Cadmium	0.44	J	0.55	0.16	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Calcium	23000		55	18	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Chromium	21	B	2.8	0.48	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Cobalt	3.3		1.4	0.31	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Copper	20		2.8	0.60	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Iron	17000		55	21	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Lead	39		1.4	0.69	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Magnesium	4000		28	11	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Manganese	440		2.8	0.55	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Nickel	49		2.8	0.75	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Potassium	610		140	23	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Selenium	<2.8		2.8	1.4	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Silver	0.81	J	1.4	0.32	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Sodium	140	J	280	36	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Thallium	<2.8		2.8	1.4	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Vanadium	45		1.4	0.40	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5
Zinc	72		5.5	1.7	mg/Kg	☼	12/21/16 08:24	12/22/16 19:19	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.26	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 21:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/20/16 14:37	12/21/16 21:29	1
Boron	0.061	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 21:29	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B09 (0-2)

Lab Sample ID: 500-121429-12

Date Collected: 12/13/16 12:05

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/20/16 14:37	12/21/16 21:29	1
Chromium	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:29	1
Cobalt	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:29	1
Iron	<0.40		0.40	0.20	mg/L		12/20/16 14:37	12/21/16 21:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/20/16 14:37	12/21/16 21:29	1
Manganese	0.92		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:29	1
Nickel	0.050		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:29	1
Selenium	<0.050		0.050	0.020	mg/L		12/20/16 14:37	12/21/16 21:29	1
Silver	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:29	1
Zinc	0.13	J B	0.50	0.020	mg/L		12/20/16 14:37	12/21/16 21:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L		12/20/16 14:34	12/22/16 04:17	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		12/20/16 14:37	12/21/16 12:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/20/16 14:37	12/21/16 12:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/20/16 14:00	12/21/16 11:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.017	0.0090	mg/Kg	☼	12/20/16 07:00	12/20/16 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/21/16 12:54	1

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B05 (0-8)

Lab Sample ID: 500-121429-13

Date Collected: 12/13/16 12:25

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,1,1,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/14/16 15:00	12/15/16 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 120	12/14/16 15:00	12/15/16 18:10	1
Dibromofluoromethane	99		75 - 120	12/14/16 15:00	12/15/16 18:10	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/14/16 15:00	12/15/16 18:10	1
Toluene-d8 (Surr)	109		75 - 123	12/14/16 15:00	12/15/16 18:10	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	☼	12/22/16 15:26	12/23/16 16:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B05 (0-8)

Lab Sample ID: 500-121429-13

Date Collected: 12/13/16 12:25

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Naphthalene	0.097		0.038	0.0060	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2-Methylnaphthalene	0.12		0.078	0.0071	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Fluorene	0.0075 J		0.038	0.0054	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Phenanthrene	0.13		0.038	0.0054	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Anthracene	0.0073 J		0.038	0.0065	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Fluoranthene	0.096		0.038	0.0072	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Pyrene	0.072		0.038	0.0077	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Benzo[a]anthracene	0.052		0.038	0.0052	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B05 (0-8)

Lab Sample ID: 500-121429-13

Date Collected: 12/13/16 12:25

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.083		0.038	0.011	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Benzo[b]fluoranthene	0.12		0.038	0.0084	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Benzo[k]fluoranthene	0.037 J		0.038	0.011	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Benzo[a]pyrene	0.067		0.038	0.0075	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Indeno[1,2,3-cd]pyrene	0.045		0.038	0.010	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Dibenz(a,h)anthracene	0.016 J		0.038	0.0075	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
Benzo[g,h,i]perylene	0.049		0.038	0.012	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	12/22/16 15:26	12/23/16 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		40 - 130	12/22/16 15:26	12/23/16 16:45	1
Phenol-d5	75		36 - 123	12/22/16 15:26	12/23/16 16:45	1
Nitrobenzene-d5	60		33 - 124	12/22/16 15:26	12/23/16 16:45	1
2-Fluorobiphenyl	66		42 - 115	12/22/16 15:26	12/23/16 16:45	1
2,4,6-Tribromophenol	92		25 - 130	12/22/16 15:26	12/23/16 16:45	1
Terphenyl-d14	86		25 - 150	12/22/16 15:26	12/23/16 16:45	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019	0.0068	mg/Kg	☼	12/14/16 16:07	12/15/16 12:31	1
PCB-1221	<0.019		0.019	0.0085	mg/Kg	☼	12/14/16 16:07	12/15/16 12:31	1
PCB-1232	<0.019		0.019	0.0084	mg/Kg	☼	12/14/16 16:07	12/15/16 12:31	1
PCB-1242	<0.019		0.019	0.0063	mg/Kg	☼	12/14/16 16:07	12/15/16 12:31	1
PCB-1248	<0.019		0.019	0.0076	mg/Kg	☼	12/14/16 16:07	12/15/16 12:31	1
PCB-1254	<0.019		0.019	0.0042	mg/Kg	☼	12/14/16 16:07	12/15/16 12:31	1
PCB-1260	<0.019		0.019	0.0094	mg/Kg	☼	12/14/16 16:07	12/15/16 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	93		41 - 124	12/14/16 16:07	12/15/16 12:31	1
DCB Decachlorobiphenyl	75		47 - 127	12/14/16 16:07	12/15/16 12:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.99		0.99	0.20	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Arsenic	2.4		0.49	0.23	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Barium	75		0.49	0.090	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Beryllium	0.41		0.20	0.043	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Boron	5.6		2.5	0.34	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Cadmium	0.26		0.099	0.029	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Calcium	3800		9.9	3.2	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Chromium	13 B		0.49	0.085	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Cobalt	6.1		0.25	0.056	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Copper	14		0.49	0.11	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Iron	11000		9.9	3.8	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Lead	16		0.25	0.12	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Magnesium	1300		4.9	2.0	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Manganese	410		0.49	0.098	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B05 (0-8)

Lab Sample ID: 500-121429-13

Date Collected: 12/13/16 12:25

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	23		0.49	0.13	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Potassium	1200		25	4.0	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Selenium	<0.49		0.49	0.24	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Silver	<0.25		0.25	0.058	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Sodium	120		49	6.5	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Thallium	<0.49		0.49	0.24	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Vanadium	15		0.25	0.072	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	1
Zinc	66		0.99	0.31	mg/Kg	☼	12/21/16 08:24	12/22/16 19:23	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		12/20/16 14:37	12/21/16 21:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/20/16 14:37	12/21/16 21:52	1
Boron	0.17	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 21:52	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/20/16 14:37	12/21/16 21:52	1
Chromium	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:52	1
Cobalt	0.034		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:52	1
Iron	<0.40		0.40	0.20	mg/L		12/20/16 14:37	12/21/16 21:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/20/16 14:37	12/21/16 21:52	1
Manganese	10		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:52	1
Nickel	0.030		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:52	1
Selenium	<0.050		0.050	0.020	mg/L		12/20/16 14:37	12/21/16 21:52	1
Silver	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 21:52	1
Zinc	0.21	J B	0.50	0.020	mg/L		12/20/16 14:37	12/21/16 21:52	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		12/20/16 14:34	12/22/16 04:24	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		12/20/16 14:37	12/21/16 12:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/20/16 14:37	12/21/16 12:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/20/16 14:00	12/21/16 11:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.017	0.0090	mg/Kg	☼	12/20/16 07:00	12/20/16 13:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/21/16 13:00	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B06 (0-4)

Lab Sample ID: 500-121429-14

Date Collected: 12/13/16 12:55

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	12/14/16 15:00	12/16/16 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130	X	70 - 120	12/14/16 15:00	12/16/16 12:48	1
Dibromofluoromethane	101		75 - 120	12/14/16 15:00	12/16/16 12:48	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/14/16 15:00	12/16/16 12:48	1
Toluene-d8 (Surr)	114		75 - 123	12/14/16 15:00	12/16/16 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	0.085	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B06 (0-4)

Lab Sample ID: 500-121429-14

Date Collected: 12/13/16 12:55

Matrix: Solid

Date Received: 12/14/16 10:30

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	☼	12/22/16 15:26	12/23/16 18:42	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Naphthalene	0.21		0.038	0.0059	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2-Methylnaphthalene	0.36		0.077	0.0070	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Acenaphthylene	0.0096 J		0.038	0.0050	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Acenaphthene	0.020 J		0.038	0.0069	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Dibenzofuran	0.17 J		0.19	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Fluorene	0.016 J		0.038	0.0054	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Phenanthrene	0.35		0.038	0.0053	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Anthracene	0.040		0.038	0.0064	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Fluoranthene	0.35		0.038	0.0071	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Pyrene	0.41		0.038	0.0076	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Benzo[a]anthracene	0.22		0.038	0.0051	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B06 (0-4)

Lab Sample ID: 500-121429-14

Date Collected: 12/13/16 12:55

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.29		0.038	0.010	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Benzo[b]fluoranthene	0.58		0.038	0.0083	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Benzo[k]fluoranthene	0.21		0.038	0.011	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Benzo[a]pyrene	0.34		0.038	0.0074	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Indeno[1,2,3-cd]pyrene	0.14		0.038	0.0099	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Dibenz(a,h)anthracene	0.047		0.038	0.0074	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
Benzo[g,h,i]perylene	0.15		0.038	0.012	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1
3 & 4 Methylphenol	0.47		0.19	0.064	mg/Kg	☼	12/22/16 15:26	12/23/16 18:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		40 - 130	12/22/16 15:26	12/23/16 18:42	1
Phenol-d5	87		36 - 123	12/22/16 15:26	12/23/16 18:42	1
Nitrobenzene-d5	73		33 - 124	12/22/16 15:26	12/23/16 18:42	1
2-Fluorobiphenyl	72		42 - 115	12/22/16 15:26	12/23/16 18:42	1
2,4,6-Tribromophenol	76		25 - 130	12/22/16 15:26	12/23/16 18:42	1
Terphenyl-d14	115		25 - 150	12/22/16 15:26	12/23/16 18:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.42	J	1.1	0.23	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Arsenic	5.6		0.56	0.26	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Barium	61		0.56	0.10	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Beryllium	0.30		0.22	0.048	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Boron	5.6		2.8	0.39	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Cadmium	1.4		0.11	0.032	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Calcium	27000		11	3.6	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Chromium	42	B	0.56	0.096	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Cobalt	3.9		0.28	0.063	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Copper	86		0.56	0.12	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Iron	29000		11	4.3	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Lead	230		0.28	0.14	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Magnesium	3800		5.6	2.3	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Manganese	510		0.56	0.11	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Nickel	68		0.56	0.15	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Potassium	550		28	4.5	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Silver	0.46		0.28	0.065	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Sodium	160		56	7.4	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Vanadium	11		0.28	0.081	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1
Zinc	200		1.1	0.35	mg/Kg	☼	12/21/16 08:24	12/22/16 19:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.25	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 21:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/20/16 14:37	12/21/16 21:59	1
Boron	0.14	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 21:59	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-2

Client Sample ID: 1314V3-06-B06 (0-4)

Lab Sample ID: 500-121429-14

Date Collected: 12/13/16 12:55

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 85.3

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	-	12/20/16 14:37	12/21/16 21:59	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Iron	<0.40		0.40	0.20	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Manganese	0.24		0.025	0.010	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Nickel	0.017	J	0.025	0.010	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Silver	<0.025		0.025	0.010	mg/L	-	12/20/16 14:37	12/21/16 21:59	1
Zinc	0.076	J B	0.50	0.020	mg/L	-	12/20/16 14:37	12/21/16 21:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.013	J	0.025	0.010	mg/L	-	12/20/16 14:34	12/22/16 04:31	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	-	12/20/16 14:37	12/21/16 12:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/20/16 14:37	12/21/16 12:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/20/16 14:00	12/21/16 12:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.059		0.020	0.010	mg/Kg	☼	12/20/16 07:00	12/20/16 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU	-		12/21/16 13:06	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121429-2

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.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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: 500-121429-2

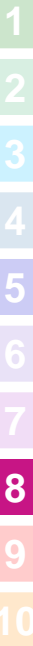
Laboratory: TestAmerica Chicago

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 #: 500-121429
 Chain of Custody Number: EE116-36
 Page _____ of _____
 Temperature °C of Cooler: _____

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 #															
F74		50012744															
Project Location/State		Lab PM															
Port Island, Coahuila, IL		D-Wright															
Sampler																	
S-Cooper																	
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	Total TAP Metals	TCUP/SPD TAP Metals	PCB	P4/0% Sel	Comments				
			Date	Time													
11		1314V3-06-B04 (0-3.2)	12-13-16	1145	2	S	X	X	X	X	X	X					
12		1314V3-06-B09 (0-2)	12-13-16	1205	2	S	X	X	X	X	X	X					
13		1314V3-06-B05 (0-8)	12-13-16	1225	2	S	X	X	X	X	X	X					
14		1314V3-06-B06 (0-4)	12-13-16	1255	2	S	X	X	X	X	X	X					
15		1314V3-06-B08 (0-5)	12-13-16	1330	2	S	X	X	X	X	X	X					
16		1314V3-06-B08 (5-10)	12-13-16	1335	2	S	X	X	X	X	X	X					
17		1314V3-06-B07 (0-4.3)	12-13-16	1355	2	S	X	X	X	X	X	X					
12-13-16																	

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	Company	Date	Time	Received By	Company	Date	Time
<i>[Signature]</i>	EE	12-13-16	1800	<i>[Signature]</i>	EE	12/14/16	1030
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
 Shipped: FedEx
 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: 500-121429-2

Login Number: 121429

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	2.0,4.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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):

190 22nd Street (ISGS #1314V3-8)

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: 41.51239 Longitude: -90.50814

(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 Management Center.

Project Name: FAI 74 (I-74)Latitude: 41.51239 Longitude: -90.50814Uncontaminated 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 1314V3-08-B01 was sampled within the construction zone adjacent to ISGS #1314V3-8 (Commercial Building). Refer to PSI Report for ISGS #1314V3-8 (Commercial Building) including Table 4-4, and Figures 4-1 and 4-7.

- 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 J121121-1.

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

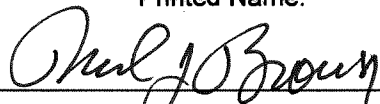
I, Neil J. Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental 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:


3/17/17

Date:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-8 (Commercial Building)		Comparison Criteria					
BORING	1314V3-08-B01	1314V3-08-B01	MACs			TACO		
SAMPLE	1314V3-08-B01 (0-6)	1314V3-08-B01 (6-12)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil						
DEPTH (feet)	0-6	6-12						
pH	7.8	7.7						
VOCs (mg/kg)								
2-Butanone (MEK)	0.022	ND U	--	--	--	--	--	--
Acetone	0.11	0.024	25	--	--	70,000	100,000	--
SVOCs (mg/kg)								
2-Methylnaphthalene	0.016 J	ND U	--	--	--	--	--	--
Acenaphthene	0.013 J	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	0.049	ND U	--	--	--	--	--	--
Anthracene	0.072	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.24	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.24 †	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.33	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.095 J	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.15	ND U	9	--	--	9	1,700	--
Chrysene	0.26	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.027 J	ND U	0.09	0.42	0.2	0.42	17	--
Diethyl phthalate	ND U	0.29	470	--	--	2,000	2,000	--
Fluoranthene	0.63	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.03 J	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.094 J	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.03 J	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.38	ND U	--	--	--	--	--	--
Pyrene	0.48	ND U	2300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	0.9 J	0.53 J	5	--	--	31	82	--
Arsenic	2.8	11	11.3	13	--	13	61	--
Barium	51	37	1,500	--	--	5,500	14,000	--
Beryllium	0.6	0.53	22	--	--	160	410	--
Boron	13	2.3 J	40	--	--	16,000	41,000	--
Cadmium	0.27	0.89	5.2	--	--	78	200	--
Calcium	37,000 J	2,400	--	--	--	--	--	--
Chromium	10	12	21	--	--	230	690	--
Cobalt	4.6 J	6.8	20	--	--	4,700	12,000	--
Copper	15 J	36	2,900	--	--	2,900	8,200	--
Iron	13,000 J	17,000 †m	15,000	15,900	--	--	--	--
Lead	38 J	4	107	--	--	400	700	--
Magnesium	1,400 J	1,200	325,000	--	--	--	730,000	--
Manganese	230	98	630	636	--	1,600	4,100	--
Mercury	0.22	0.028	0.89	--	--	10	0.1	--
Nickel	11 J	20	100	--	--	1,600	4,100	--
Potassium	1,200 J	490	--	--	--	--	--	--
Selenium	ND U	0.33 J	1.3	--	--	390	1,000	--
Sodium	170	69	--	--	--	--	--	--
Thallium	0.66	0.62	2.6	--	--	6.3	160	--
Vanadium	18	55	550	--	--	550	1,400	--
Zinc	100 J	27	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Antimony	0.0083 L	ND U	--	--	--	--	--	0.006
Barium	0.47 J	0.23 J	--	--	--	--	--	2
Boron	0.3 J	0.071 J	--	--	--	--	--	2
Cadmium	ND U	0.01 L	--	--	--	--	--	0.005
Cobalt	0.014 J	0.025	--	--	--	--	--	1
Iron	ND U	ND U	--	--	--	--	--	5
Lead	0.016 L	ND U	--	--	--	--	--	0.0075
Manganese	2.4 L	0.75 L	--	--	--	--	--	0.15
Nickel	0.019 J	0.055	--	--	--	--	--	0.1
Zinc	0.62	0.077 J	--	--	--	--	--	5
SPLP Metals (mg/L)								
Antimony	ND U	NA	--	--	--	--	--	0.006
Cadmium	NA	0.0034 J	--	--	--	--	--	0.005
Lead	0.038 L	NA	--	--	--	--	--	0.0075
Manganese	0.12	0.13	--	--	--	--	--	0.15

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121121-1
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:
12/21/2016 2:49:37 PM

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

LINKS

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results through
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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.

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Case Narrative

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

TestAmerica Job ID: 500-121121-1

Job ID: 500-121121-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-121121-1**

Comments

No additional comments.

Receipt

The samples were received on 12/7/2016 1:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3° C and 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 sample contained one acid surrogate outside acceptance limits: (500-121121-E-1-S MS). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121121-E-1-S MS) and (500-121121-E-1-T MSD)

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

Metals

Method(s) 6020A: The continuing calibration verifications (CCV), at lines 49, 61 and 72, associated with batch 500-365046 recovered above the upper control limit for Thallium. Also, the low level CCV bracketing these samples were all within control limits. The samples associated with these CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (0-6)

Lab Sample ID: 500-121121-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.11		0.022	0.0097	mg/Kg	1	☼	8260B	Total/NA	
2-Butanone (MEK)	0.022		0.0055	0.0025	mg/Kg	1	☼	8260B	Total/NA	
Naphthalene	0.030	J	0.042	0.0065	mg/Kg	1	☼	8270D	Total/NA	
2-Methylnaphthalene	0.016	J	0.085	0.0078	mg/Kg	1	☼	8270D	Total/NA	
Acenaphthylene	0.049		0.042	0.0056	mg/Kg	1	☼	8270D	Total/NA	
Acenaphthene	0.013	J	0.042	0.0076	mg/Kg	1	☼	8270D	Total/NA	
Fluorene	0.030	J	0.042	0.0060	mg/Kg	1	☼	8270D	Total/NA	
Phenanthrene	0.38		0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA	
Anthracene	0.072		0.042	0.0071	mg/Kg	1	☼	8270D	Total/NA	
Fluoranthene	0.63		0.042	0.0079	mg/Kg	1	☼	8270D	Total/NA	
Pyrene	0.48		0.042	0.0084	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]anthracene	0.24		0.042	0.0057	mg/Kg	1	☼	8270D	Total/NA	
Chrysene	0.26		0.042	0.012	mg/Kg	1	☼	8270D	Total/NA	
Benzo[b]fluoranthene	0.33		0.042	0.0091	mg/Kg	1	☼	8270D	Total/NA	
Benzo[k]fluoranthene	0.15		0.042	0.012	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]pyrene	0.24		0.042	0.0082	mg/Kg	1	☼	8270D	Total/NA	
Indeno[1,2,3-cd]pyrene	0.094	F1	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA	
Dibenz(a,h)anthracene	0.027	J F1	0.042	0.0082	mg/Kg	1	☼	8270D	Total/NA	
Benzo[g,h,i]perylene	0.095	F1	0.042	0.014	mg/Kg	1	☼	8270D	Total/NA	
Antimony	0.90	J F1	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA	
Arsenic	2.8		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA	
Barium	51		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.60		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA	
Boron	13		3.0	0.42	mg/Kg	1	☼	6010B	Total/NA	
Cadmium	0.27		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA	
Calcium	37000	B	12	3.9	mg/Kg	1	☼	6010B	Total/NA	
Chromium	10	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA	
Cobalt	4.6		0.30	0.068	mg/Kg	1	☼	6010B	Total/NA	
Copper	15		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA	
Iron	13000	F2	12	4.6	mg/Kg	1	☼	6010B	Total/NA	
Lead	38		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA	
Magnesium	1400	B F1	6.0	2.4	mg/Kg	1	☼	6010B	Total/NA	
Manganese	230		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA	
Nickel	11		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA	
Potassium	1200	F1	30	4.9	mg/Kg	1	☼	6010B	Total/NA	
Sodium	170		60	7.9	mg/Kg	1	☼	6010B	Total/NA	
Thallium	0.66		0.60	0.29	mg/Kg	1	☼	6010B	Total/NA	
Vanadium	18		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA	
Zinc	100	F1 F2	1.2	0.38	mg/Kg	1	☼	6010B	Total/NA	
Barium	0.47	J	0.50	0.050	mg/L	1		6010B	TCLP	
Boron	0.30	J B	0.50	0.050	mg/L	1		6010B	TCLP	
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP	
Lead	0.016		0.0075	0.0075	mg/L	1		6010B	TCLP	
Manganese	2.4		0.025	0.010	mg/L	1		6010B	TCLP	
Nickel	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP	
Zinc	0.62		0.50	0.020	mg/L	1		6010B	TCLP	
Lead	0.038		0.0075	0.0075	mg/L	1		6010B	SPLP East	
Manganese	0.12		0.025	0.010	mg/L	1		6010B	SPLP East	
Antimony	0.0083		0.0060	0.0060	mg/L	1		6020A	TCLP	
Mercury	0.22		0.021	0.011	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: 500-121121-1

Client Sample ID: 1314V3-08-B01 (0-6) (Continued)

Lab Sample ID: 500-121121-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-08-B01 (6-12)

Lab Sample ID: 500-121121-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.024		0.019	0.0082	mg/Kg	1	☼	8260B	Total/NA
Diethyl phthalate	0.29		0.19	0.064	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.53	J	1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	11		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.89		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	2400	B	11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.8		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	36		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	4.0		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1200	B	5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	98		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	490		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	69		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.62		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	55		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	27		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.23	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.071	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.010		0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.75		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.055		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.077	J	0.50	0.020	mg/L	1		6010B	TCLP
Cadmium	0.0034	J	0.0050	0.0020	mg/L	1		6010B	SPLP East
Manganese	0.13		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.028		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		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: 500-121121-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121121-1	1314V3-08-B01 (0-6)	Solid	12/06/16 08:15	12/07/16 13:30
500-121121-2	1314V3-08-B01 (6-12)	Solid	12/06/16 08:20	12/07/16 13:30

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Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (0-6)

Lab Sample ID: 500-121121-1

Date Collected: 12/06/16 08:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.11		0.022	0.0097	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Benzene	<0.0022		0.0022	0.00057	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Bromoform	<0.0022		0.0022	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
2-Butanone (MEK)	0.022		0.0055	0.0025	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Carbon disulfide	<0.0055		0.0055	0.0012	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Chlorobenzene	<0.0022		0.0022	0.00082	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Chloroethane	<0.0055		0.0055	0.0016	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Chloroform	<0.0022		0.0022	0.00077	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00062	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Dibromochloromethane	<0.0022		0.0022	0.00072	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,1-Dichloroethane	<0.0022		0.0022	0.00076	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,1-Dichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,3-Dichloropropane, Total	<0.0022		0.0022	0.00078	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Methylene Chloride	<0.0055		0.0055	0.0022	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Styrene	<0.0022		0.0022	0.00067	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00071	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Tetrachloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00098	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00078	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00095	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Trichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Vinyl acetate	<0.0055		0.0055	0.0019	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Vinyl chloride	<0.0022		0.0022	0.00098	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1
Xylenes, Total	<0.0044		0.0044	0.00071	mg/Kg	☼	12/07/16 18:00	12/08/16 22:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/07/16 18:00	12/08/16 22:08	1
Dibromofluoromethane	118		75 - 120	12/07/16 18:00	12/08/16 22:08	1
1,2-Dichloroethane-d4 (Surr)	125		69 - 134	12/07/16 18:00	12/08/16 22:08	1
Toluene-d8 (Surr)	107		75 - 123	12/07/16 18:00	12/08/16 22:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.094	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Bis(2-chloroethyl)ether	<0.21	F1	0.21	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (0-6)

Lab Sample ID: 500-121121-1

Date Collected: 12/06/16 08:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Hexachloroethane	<0.21	F1	0.21	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Naphthalene	0.030	J	0.042	0.0065	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,4,6-Trichlorophenol	<0.42	F2	0.42	0.15	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,4,5-Trichlorophenol	<0.42	F2	0.42	0.097	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Hexachlorocyclopentadiene	<0.85	F1	0.85	0.24	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2-Methylnaphthalene	0.016	J	0.085	0.0078	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,4-Dinitrophenol	<0.85	F1	0.85	0.75	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Acenaphthylene	0.049		0.042	0.0056	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Acenaphthene	0.013	J	0.042	0.0076	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Fluorene	0.030	J	0.042	0.0060	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Phenanthrene	0.38		0.042	0.0059	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Anthracene	0.072		0.042	0.0071	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Fluoranthene	0.63		0.042	0.0079	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Pyrene	0.48		0.042	0.0084	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Benzo[a]anthracene	0.24		0.042	0.0057	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (0-6)

Lab Sample ID: 500-121121-1

Date Collected: 12/06/16 08:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.26		0.042	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
3,3'-Dichlorobenzidine	<0.21	F1	0.21	0.059	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Benzo[b]fluoranthene	0.33		0.042	0.0091	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Benzo[k]fluoranthene	0.15		0.042	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Benzo[a]pyrene	0.24		0.042	0.0082	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Indeno[1,2,3-cd]pyrene	0.094	F1	0.042	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Dibenz(a,h)anthracene	0.027	J F1	0.042	0.0082	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
Benzo[g,h,i]perylene	0.095	F1	0.042	0.014	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1
3 & 4 Methylphenol	<0.21	F2	0.21	0.071	mg/Kg	☼	12/14/16 07:31	12/15/16 05:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/14/16 07:31	12/15/16 05:26	1
Phenol-d5	107		36 - 123	12/14/16 07:31	12/15/16 05:26	1
Nitrobenzene-d5	93		33 - 124	12/14/16 07:31	12/15/16 05:26	1
2-Fluorobiphenyl	88		42 - 115	12/14/16 07:31	12/15/16 05:26	1
2,4,6-Tribromophenol	82		25 - 130	12/14/16 07:31	12/15/16 05:26	1
Terphenyl-d14	96		25 - 150	12/14/16 07:31	12/15/16 05:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.90	J F1	1.2	0.25	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Arsenic	2.8		0.60	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Barium	51		0.60	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Beryllium	0.60		0.24	0.052	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Boron	13		3.0	0.42	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Cadmium	0.27		0.12	0.035	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Calcium	37000	B	12	3.9	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Chromium	10	B	0.60	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Cobalt	4.6		0.30	0.068	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Copper	15		0.60	0.13	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Iron	13000	F2	12	4.6	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Lead	38		0.30	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Magnesium	1400	B F1	6.0	2.4	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Manganese	230		0.60	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Nickel	11		0.60	0.16	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Potassium	1200	F1	30	4.9	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Selenium	<0.60		0.60	0.30	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Sodium	170		60	7.9	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Thallium	0.66		0.60	0.29	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Vanadium	18		0.30	0.087	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1
Zinc	100	F1 F2	1.2	0.38	mg/Kg	☼	12/10/16 10:01	12/12/16 01:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.47	J	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 02:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 02:53	1
Boron	0.30	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 02:53	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (0-6)

Lab Sample ID: 500-121121-1

Date Collected: 12/06/16 08:15

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 77.9

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		12/13/16 08:02	12/14/16 02:53	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:53	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:53	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 02:53	1
Lead	0.016		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 02:53	1
Manganese	2.4		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:53	1
Nickel	0.019	J	0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:53	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 02:53	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:53	1
Zinc	0.62		0.50	0.020	mg/L		12/13/16 08:02	12/14/16 02:53	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.038		0.0075	0.0075	mg/L		12/12/16 09:10	12/14/16 05:44	1
Manganese	0.12		0.025	0.010	mg/L		12/12/16 09:10	12/14/16 05:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0083		0.0060	0.0060	mg/L		12/13/16 08:02	12/13/16 18:50	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 18:50	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/12/16 09:10	12/14/16 13:20	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		12/12/16 12:00	12/13/16 12:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.021	0.011	mg/Kg	☼	12/09/16 15:45	12/12/16 13:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/09/16 20:20	1

Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (6-12)

Lab Sample ID: 500-121121-2

Date Collected: 12/06/16 08:20

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.024		0.019	0.0082	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	12/07/16 18:00	12/08/16 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/07/16 18:00	12/08/16 22:34	1
Dibromofluoromethane	117		75 - 120	12/07/16 18:00	12/08/16 22:34	1
1,2-Dichloroethane-d4 (Surr)	120		69 - 134	12/07/16 18:00	12/08/16 22:34	1
Toluene-d8 (Surr)	107		75 - 123	12/07/16 18:00	12/08/16 22:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (6-12)

Lab Sample ID: 500-121121-2

Date Collected: 12/06/16 08:20

Matrix: Solid

Date Received: 12/07/16 13:30

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	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Diethyl phthalate	0.29		0.19	0.064	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (6-12)

Lab Sample ID: 500-121121-2

Date Collected: 12/06/16 08:20

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/14/16 07:31	12/15/16 00:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	91		40 - 130	12/14/16 07:31	12/15/16 00:53	1
Phenol-d5	93		36 - 123	12/14/16 07:31	12/15/16 00:53	1
Nitrobenzene-d5	88		33 - 124	12/14/16 07:31	12/15/16 00:53	1
2-Fluorobiphenyl	79		42 - 115	12/14/16 07:31	12/15/16 00:53	1
2,4,6-Tribromophenol	67		25 - 130	12/14/16 07:31	12/15/16 00:53	1
Terphenyl-d14	92		25 - 150	12/14/16 07:31	12/15/16 00:53	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.53	J	1.1	0.24	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Arsenic	11		0.57	0.26	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Barium	37		0.57	0.10	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Beryllium	0.53		0.23	0.049	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Boron	2.3	J	2.8	0.40	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Cadmium	0.89		0.11	0.033	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Calcium	2400	B	11	3.7	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Chromium	12	B	0.57	0.098	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Cobalt	6.8		0.28	0.064	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Copper	36		0.57	0.12	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Iron	17000		11	4.4	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Lead	4.0		0.28	0.14	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Magnesium	1200	B	5.7	2.3	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Manganese	98		0.57	0.11	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Nickel	20		0.57	0.15	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Potassium	490		28	4.6	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Selenium	0.33	J	0.57	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Silver	<0.28		0.28	0.067	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Sodium	69		57	7.5	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Thallium	0.62		0.57	0.28	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Vanadium	55		0.28	0.083	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1
Zinc	27		1.1	0.36	mg/Kg	☼	12/10/16 10:01	12/12/16 02:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.23	J	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 02:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/13/16 08:02	12/14/16 02:57	1
Boron	0.071	J B	0.50	0.050	mg/L		12/13/16 08:02	12/14/16 02:57	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121121-1

Client Sample ID: 1314V3-08-B01 (6-12)

Lab Sample ID: 500-121121-2

Date Collected: 12/06/16 08:20

Matrix: Solid

Date Received: 12/07/16 13:30

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.010		0.0050	0.0020	mg/L		12/13/16 08:02	12/14/16 02:57	1
Chromium	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:57	1
Cobalt	0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:57	1
Iron	<0.40		0.40	0.20	mg/L		12/13/16 08:02	12/14/16 02:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/13/16 08:02	12/14/16 02:57	1
Manganese	0.75		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:57	1
Nickel	0.055		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:57	1
Selenium	<0.050		0.050	0.020	mg/L		12/13/16 08:02	12/14/16 02:57	1
Silver	<0.025		0.025	0.010	mg/L		12/13/16 08:02	12/14/16 02:57	1
Zinc	0.077	J	0.50	0.020	mg/L		12/13/16 08:02	12/14/16 02:57	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0034	J	0.0050	0.0020	mg/L		12/12/16 09:10	12/14/16 06:27	1
Manganese	0.13		0.025	0.010	mg/L		12/12/16 09:10	12/14/16 06:27	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		12/13/16 08:02	12/13/16 18:54	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		12/13/16 08:02	12/13/16 18:54	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		12/12/16 12:00	12/13/16 12:45	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	☼	12/09/16 15:45	12/12/16 10:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/09/16 20:23	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121121-1

Qualifiers

GC/MS Semi VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 500-121121-1

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
 Phone: 708.534.5200 Fax: 708.5



500-121121 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 #: 500-121121

Chain of Custody Number: EE46-21

Page _____ of _____

Temperature °C of Cooler: 3,3,4,5

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Vol	Sub	1st/2nd/3rd/4th/5th	6th/7th/8th/9th	10th/11th/12th
EE		1009008-0046-01									
Project Name		Lab Project #		Preservative		Parameter		Matrix		Comments	
E74		5001274									
Project Location/State		Lab Project #		Preservative		Parameter		Matrix		Comments	
Rock Island County, IL		5001274									
Sampler		Lab PM		Preservative		Parameter		Matrix		Comments	
S. Cooper		D. Winkler									
1		1314V3-08-B01 (0-6)	12-6-16	0815	2	S	X	X	X	X	X
2		1314V3-08-B01 (6-12)	12-6-16	0820	2	S	X	X	X	X	X
12-6-16											

- 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
<i>[Signature]</i>	EE	12-6-16	1115	<i>[Signature]</i>	TR CRT	12/7/16	1330
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
 Shipped: Fed-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: 500-121121-1

Login Number: 121121

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	3.3,4.5
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.	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").	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):

1900 block of River Drive (ISGS #1314V3-11)

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: 41.51075 Longitude: -90.51162

(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 Management Center.

Project Name: FAI 74 (I-74)

Latitude: 41.51075 Longitude: -90.51162

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 1314V3-11-B01, -B02, and -B03 were sampled within the construction zone adjacent to ISGS #1314V3-11 (Vacant Land). Refer to PSI Report for ISGS #1314V3-11 (Vacant Land) including Table 4-4, and Figures 4-2 and 4-9.

- 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 J121261-4.

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
 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

3/17/17
 Date:



Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-11 (Vacant Land)				Comparison Criteria					
	1314V3-11-B01	1314V3-11-B02	1314V3-11-B03		MACs			TACO		
BORING	1314V3-11-B01	1314V3-11-B02	1314V3-11-B03		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-11-B01 (0-1)	1314V3-11-B02 (0-1)	1314V3-11-B03 (0-1)							
MATRIX	Soil	Soil	Soil							
DEPTH (feet)	0-1	0-1	0-1							
pH	8.4	8.4	8.5	8.5						
VOCs (None Detected)										
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	0.013 J	0.02 J	0.016 J	--	--	--	--	--	--
Acenaphthene	ND U	0.016 J	0.031 J	0.025 J	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.012 J	0.011 J	0.01 J	--	--	--	--	--	--
Anthracene	0.011 J	0.045	0.092	0.074	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.055	0.22	0.4	0.35	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.074	0.29 †	0.51 †	0.42 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.11	0.44	0.67	0.59	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.029 J	0.095	0.15	0.12	--	--	--	--	--	--
Benzo(k)fluoranthene	0.039	0.16	0.27 J	0.78 J	9	--	--	9	1,700	--
Chrysene	0.062	0.25	0.38	0.34	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.034 J	0.054	0.046	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.12	0.49	0.79	0.68	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.013 J	0.032 J	0.023 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.039	0.11	0.16	0.14	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	0.0088 J	0.014 J	0.013 J	1.8	--	--	170	1.8	--
Phenanthrene	0.053	0.25	0.4	0.35	--	--	--	--	--	--
Pyrene	0.1	0.57	0.76	0.7	2300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	ND UJ	0.37 J	0.47 J	0.33 J	5	--	--	31	82	--
Arsenic	3.9	4.8	4.3	4.1	11.3	13	--	13	61	--
Barium	81	85	81	87	1,500	--	--	5,500	14,000	--
Beryllium	0.49	0.47	0.56	0.54	22	--	--	160	410	--
Boron	3.3 J	4.1	5.6	5.1	40	--	--	16,000	41,000	--
Cadmium	0.23	0.44	0.44	0.43	5.2	--	--	78	200	--
Calcium	8,900	83,000	19,000	21,000	--	--	--	--	--	--
Chromium	13	17	15	15	21	--	--	230	690	--
Cobalt	4.8	5.2	5	5	20	--	--	4,700	12,000	--
Copper	12	20	19	17	2,900	--	--	2,900	8,200	--
Iron	12,000 J	14,000	15,000	13,000	15,000	15,900	--	--	--	--
Lead	26 J	130 †	73	65	107	--	--	400	700	--
Magnesium	2,800	4,500	4,300	4,000	325,000	--	--	--	730,000	--
Manganese	410 J	580	440	460	630	636	--	1,600	4,100	--
Mercury	0.065	0.13	0.12	0.091	0.89	--	--	10	0.1	--
Nickel	11	14	13	13	100	--	--	1,600	4,100	--
Potassium	570	650	580	600	--	--	--	--	--	--
Selenium	0.28 J	ND U	ND U	0.3 J	1.3	--	--	390	1,000	--
Sodium	290	180	280	270	--	--	--	--	--	--
Thallium	0.66	0.93	0.8	0.84	2.6	--	--	6.3	160	--
Vanadium	20	18	21	20	550	--	--	550	1,400	--
Zinc	45 J	120	85	76	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.78	0.86	0.74	0.74	--	--	--	--	--	2
Boron	0.074 J	0.061 J	0.064 J	0.06 J	--	--	--	--	--	2
Cadmium	0.0021 J	0.0037 J	0.0032 J	0.0029 J	--	--	--	--	--	0.005
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.9 L	0.97 L	0.46 L	0.61 L	--	--	--	--	--	0.15
Zinc	0.048 J	0.25 J	0.069 J	0.094 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	0.38 L	0.29 L	0.33 L	0.37 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: 500-121261-4
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:
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Designee for
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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.

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Case Narrative

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

TestAmerica Job ID: 500-121261-4

Job ID: 500-121261-4

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-121261-4

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: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121261-E-19-P MS) and (500-121261-E-19-Q MS)

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

Metals

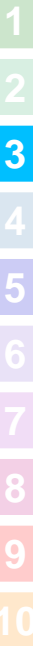
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)

Lab Sample ID: 500-121261-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.014	J	0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.020	J	0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.011	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.031	J	0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.032	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.40		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.092		0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.79		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.76		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.40		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.38		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.67		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.27		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.51		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.16		0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.054		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
Antimony	0.47	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.3		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	81		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	5.6		2.8	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.44		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000	B	11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.0		0.28	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	73		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4300		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	580		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	280		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.28	0.080	mg/Kg	1	☼	6010B	Total/NA
Zinc	85		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0032	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.46		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.069	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.33		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.12	B	0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-11-B03 (0-1)D

Lab Sample ID: 500-121261-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.013	J	0.036	0.0056	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: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)D (Continued)

Lab Sample ID: 500-121261-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.016	J	0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.010	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.025	J	0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.023	J	0.036	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.35		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.074		0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.68		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.70		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.35		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.34		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.59		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.78		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.42		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.046		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
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	87		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.22	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	5.1		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.43		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	21000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.0		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	65		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	600		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	270		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.84		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	76		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.060	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0029	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.61		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.094	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.37		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.091	B	0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-11-B02 (0-1)

Lab Sample ID: 500-121261-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0088	J	0.037	0.0058	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: 500-121261-4

Client Sample ID: 1314V3-11-B02 (0-1) (Continued)

Lab Sample ID: 500-121261-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.013	J	0.075	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.012	J	0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.016	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.25		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.045		0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.49		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.57		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.22		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.25		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.44		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.16		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.29		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.11		0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.034	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.095		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.37	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.8		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	85		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	4.1		2.8	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.44		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	83000	B	110	35	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.28	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	130		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4500		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	580		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	650		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.93		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.080	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.86		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0037	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.97		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.25	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.29		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.13	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: 1314V3-11-B01 (0-1)

Lab Sample ID: 500-121261-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.053		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.011	J	0.037	0.0062	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: 500-121261-4

Client Sample ID: 1314V3-11-B01 (0-1) (Continued)

Lab Sample ID: 500-121261-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.12		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.10		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.055		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.062		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.11		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.039		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.074		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.039		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.029	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.9		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	81		0.54	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	3.3	F1	2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	8900	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.54	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.8		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	26	F2	0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2800		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	570		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.28	J F1	0.54	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	290		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.66		0.54	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	45	F1	1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.78		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.90		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.048	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.38		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.065	B	0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		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: 500-121261-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121261-16	1314V3-11-B03 (0-1)	Solid	12/08/16 16:15	12/09/16 10:00
500-121261-17	1314V3-11-B03 (0-1)D	Solid	12/08/16 16:15	12/09/16 10:00
500-121261-18	1314V3-11-B02 (0-1)	Solid	12/08/16 16:35	12/09/16 10:00
500-121261-19	1314V3-11-B01 (0-1)	Solid	12/08/16 16:55	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: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)

Lab Sample ID: 500-121261-16

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0093	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Benzene	<0.0021		0.0021	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Bromodichloromethane	<0.0021		0.0021	0.00044	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Bromoform	<0.0021		0.0021	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
2-Butanone (MEK)	<0.0053		0.0053	0.0024	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Carbon tetrachloride	<0.0021		0.0021	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Chlorobenzene	<0.0021		0.0021	0.00079	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Chloroform	<0.0021		0.0021	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Dibromochloromethane	<0.0021		0.0021	0.00070	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,1-Dichloroethane	<0.0021		0.0021	0.00073	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,2-Dichloroethane	<0.0053		0.0053	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,1-Dichloroethene	<0.0021		0.0021	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00075	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
2-Hexanone	<0.0053		0.0053	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00063	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Styrene	<0.0021		0.0021	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00068	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Tetrachloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Toluene	<0.0021		0.0021	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00095	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00075	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00092	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Trichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Vinyl acetate	<0.0053		0.0053	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Vinyl chloride	<0.0021		0.0021	0.00095	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1
Xylenes, Total	<0.0043		0.0043	0.00068	mg/Kg	☼	12/09/16 17:53	12/11/16 17:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/09/16 17:53	12/11/16 17:47	1
Dibromofluoromethane	99		75 - 120	12/09/16 17:53	12/11/16 17:47	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/09/16 17:53	12/11/16 17:47	1
Toluene-d8 (Surr)	105		75 - 123	12/09/16 17:53	12/11/16 17:47	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	☼	12/19/16 16:12	12/20/16 19:51	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)

Lab Sample ID: 500-121261-16

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Naphthalene	0.014	J	0.036	0.0056	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2-Methylnaphthalene	0.020	J	0.074	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,4-Dinitrophenol	<0.74	*	0.74	0.64	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Acenaphthylene	0.011	J	0.036	0.0048	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Acenaphthene	0.031	J	0.036	0.0066	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Fluorene	0.032	J	0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Hexachlorobenzene	<0.074		0.074	0.0084	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Pentachlorophenol	<0.74		0.74	0.58	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Phenanthrene	0.40		0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Anthracene	0.092		0.036	0.0061	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Fluoranthene	0.79		0.036	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Pyrene	0.76		0.036	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Benzo[a]anthracene	0.40		0.036	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)

Lab Sample ID: 500-121261-16

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.38		0.036	0.0099	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Benzo[b]fluoranthene	0.67		0.036	0.0079	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Benzo[k]fluoranthene	0.27		0.036	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Benzo[a]pyrene	0.51		0.036	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Indeno[1,2,3-cd]pyrene	0.16		0.036	0.0094	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Dibenz(a,h)anthracene	0.054		0.036	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
Benzo[g,h,i]perylene	0.15		0.036	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		40 - 130	12/19/16 16:12	12/20/16 19:51	1
Phenol-d5	76		36 - 123	12/19/16 16:12	12/20/16 19:51	1
Nitrobenzene-d5	73		33 - 124	12/19/16 16:12	12/20/16 19:51	1
2-Fluorobiphenyl	72		42 - 115	12/19/16 16:12	12/20/16 19:51	1
2,4,6-Tribromophenol	58		25 - 130	12/19/16 16:12	12/20/16 19:51	1
Terphenyl-d14	106		25 - 150	12/19/16 16:12	12/20/16 19:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.47	J	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Arsenic	4.3		0.55	0.25	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Barium	81		0.55	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Beryllium	0.56		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Boron	5.6		2.8	0.38	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Cadmium	0.44		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Calcium	19000	B	11	3.5	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Chromium	15	B	0.55	0.095	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Cobalt	5.0		0.28	0.062	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Copper	19		0.55	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Iron	15000		11	4.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Lead	73		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Magnesium	4300		5.5	2.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Manganese	440		0.55	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Nickel	13		0.55	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Potassium	580		28	4.5	mg/Kg	☼	12/14/16 15:50	12/18/16 20:56	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Silver	<0.28		0.28	0.064	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Sodium	280		55	7.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Thallium	0.80		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Vanadium	21		0.28	0.080	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
Zinc	85		1.1	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	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		12/15/16 08:57	12/16/16 00:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:41	1
Boron	0.064	J	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:41	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)

Lab Sample ID: 500-121261-16

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0032	J	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/19/16 08:53	12/19/16 23:00	1
Manganese	0.46		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:41	1
Zinc	0.069	J	0.50	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.33		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 06:36	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	-	12/15/16 08:57	12/15/16 19:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 19:11	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 11:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	B	0.018	0.0094	mg/Kg	☼	12/14/16 16:00	12/15/16 12:44	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 16:03	1

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)D

Lab Sample ID: 500-121261-17

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

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	0.0089	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Chloroform	<0.0020		0.0020	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Chloromethane	<0.0051		0.0051	0.0020	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Dibromochloromethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,2-Dichloropropane	<0.0020		0.0020	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Ethylbenzene	<0.0020		0.0020	0.00097	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/09/16 17:53	12/11/16 18:12	1
Dibromofluoromethane	98		75 - 120	12/09/16 17:53	12/11/16 18:12	1
1,2-Dichloroethane-d4 (Surr)	111		69 - 134	12/09/16 17:53	12/11/16 18:12	1
Toluene-d8 (Surr)	104		75 - 123	12/09/16 17:53	12/11/16 18:12	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	☼	12/19/16 16:12	12/20/16 20:16	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)D

Lab Sample ID: 500-121261-17

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Naphthalene	0.013	J	0.036	0.0056	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2-Methylnaphthalene	0.016	J	0.074	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,4-Dinitrophenol	<0.74	*	0.74	0.65	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Acenaphthylene	0.010	J	0.036	0.0048	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Acenaphthene	0.025	J	0.036	0.0066	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Fluorene	0.023	J	0.036	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Phenanthrene	0.35		0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Anthracene	0.074		0.036	0.0061	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Fluoranthene	0.68		0.036	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Pyrene	0.70		0.036	0.0073	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Benzo[a]anthracene	0.35		0.036	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)D

Lab Sample ID: 500-121261-17

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.34		0.036	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Benzo[b]fluoranthene	0.59		0.036	0.0079	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Benzo[k]fluoranthene	0.78		0.036	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Benzo[a]pyrene	0.42		0.036	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Indeno[1,2,3-cd]pyrene	0.14		0.036	0.0095	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Dibenz(a,h)anthracene	0.046		0.036	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
Benzo[g,h,i]perylene	0.12		0.036	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		40 - 130	12/19/16 16:12	12/20/16 20:16	1
Phenol-d5	80		36 - 123	12/19/16 16:12	12/20/16 20:16	1
Nitrobenzene-d5	72		33 - 124	12/19/16 16:12	12/20/16 20:16	1
2-Fluorobiphenyl	74		42 - 115	12/19/16 16:12	12/20/16 20:16	1
2,4,6-Tribromophenol	62		25 - 130	12/19/16 16:12	12/20/16 20:16	1
Terphenyl-d14	116		25 - 150	12/19/16 16:12	12/20/16 20:16	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	☼	12/14/16 15:50	12/16/16 22:51	1
Arsenic	4.1		0.56	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Barium	87		0.56	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Beryllium	0.54		0.22	0.049	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Boron	5.1		2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Cadmium	0.43		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Calcium	21000	B	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Chromium	15	B	0.56	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Cobalt	5.0		0.28	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Copper	17		0.56	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Iron	13000		11	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Lead	65		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Magnesium	4000		5.6	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Manganese	460		0.56	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Nickel	13		0.56	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Potassium	600		28	4.6	mg/Kg	☼	12/14/16 15:50	12/18/16 21:08	1
Selenium	0.30	J	0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Sodium	270		56	7.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Thallium	0.84		0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Vanadium	20		0.28	0.082	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
Zinc	76		1.1	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	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		12/15/16 08:57	12/16/16 00:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:46	1
Boron	0.060	J	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:46	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B03 (0-1)D

Lab Sample ID: 500-121261-17

Date Collected: 12/08/16 16:15

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.4

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	12/16/16 00:46	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:46	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:46	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/16/16 00:46	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/19/16 08:53	12/19/16 23:05	1
Manganese	0.61		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:46	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:46	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:46	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:46	1
Zinc	0.094	J	0.50	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.37		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 06:43	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	-	12/15/16 08:57	12/15/16 19:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 19:16	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	-	12/15/16 13:00	12/16/16 11:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	B	0.017	0.0090	mg/Kg	☼	12/14/16 16:00	12/15/16 12:46	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 16:06	1

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B02 (0-1)

Lab Sample ID: 500-121261-18

Date Collected: 12/08/16 16:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 88.4

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	☼	12/09/16 17:53	12/11/16 18:36	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,1,1,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/09/16 17:53	12/11/16 18:36	1
Dibromofluoromethane	104		75 - 120	12/09/16 17:53	12/11/16 18:36	1
1,2-Dichloroethane-d4 (Surr)	114		69 - 134	12/09/16 17:53	12/11/16 18:36	1
Toluene-d8 (Surr)	103		75 - 123	12/09/16 17:53	12/11/16 18:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B02 (0-1)

Lab Sample ID: 500-121261-18

Date Collected: 12/08/16 16:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Naphthalene	0.0088	J	0.037	0.0058	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2-Methylnaphthalene	0.013	J	0.075	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,4-Dinitrophenol	<0.75	*	0.75	0.66	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Acenaphthylene	0.012	J	0.037	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Acenaphthene	0.016	J	0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Fluorene	0.013	J	0.037	0.0053	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Phenanthrene	0.25		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Anthracene	0.045		0.037	0.0062	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Fluoranthene	0.49		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Pyrene	0.57		0.037	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Benzo[a]anthracene	0.22		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B02 (0-1)

Lab Sample ID: 500-121261-18

Date Collected: 12/08/16 16:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.25		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Benzo[b]fluoranthene	0.44		0.037	0.0081	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Benzo[k]fluoranthene	0.16		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Benzo[a]pyrene	0.29		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Indeno[1,2,3-cd]pyrene	0.11		0.037	0.0097	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Dibenz(a,h)anthracene	0.034	J	0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
Benzo[g,h,i]perylene	0.095		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		40 - 130	12/19/16 16:12	12/20/16 20:41	1
Phenol-d5	85		36 - 123	12/19/16 16:12	12/20/16 20:41	1
Nitrobenzene-d5	77		33 - 124	12/19/16 16:12	12/20/16 20:41	1
2-Fluorobiphenyl	76		42 - 115	12/19/16 16:12	12/20/16 20:41	1
2,4,6-Tribromophenol	51		25 - 130	12/19/16 16:12	12/20/16 20:41	1
Terphenyl-d14	130		25 - 150	12/19/16 16:12	12/20/16 20:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Arsenic	4.8		0.55	0.25	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Barium	85		0.55	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Beryllium	0.47		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Boron	4.1		2.8	0.38	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Cadmium	0.44		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Calcium	83000	B	110	35	mg/Kg	☼	12/14/16 15:50	12/18/16 21:18	10
Chromium	17	B	0.55	0.095	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Cobalt	5.2		0.28	0.062	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Copper	20		0.55	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Iron	14000		11	4.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Lead	130		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Magnesium	4500		5.5	2.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Manganese	580		0.55	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Nickel	14		0.55	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Potassium	650		28	4.5	mg/Kg	☼	12/14/16 15:50	12/18/16 21:13	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Silver	<0.28		0.28	0.064	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Sodium	180		55	7.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Thallium	0.93		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Vanadium	18		0.28	0.080	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
Zinc	120		1.1	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.86		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:50	1
Boron	0.061	J	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:50	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B02 (0-1)

Lab Sample ID: 500-121261-18

Date Collected: 12/08/16 16:35

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0037	J	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/19/16 08:53	12/19/16 23:10	1
Manganese	0.97		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:50	1
Zinc	0.25	J	0.50	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.29		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 06:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 19:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 19:30	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	-	12/15/16 13:00	12/16/16 11:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	B	0.018	0.0096	mg/Kg	☼	12/14/16 16:00	12/15/16 12:49	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 16:09	1

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B01 (0-1)

Lab Sample ID: 500-121261-19

Date Collected: 12/08/16 16:55

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 85.9

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	☼	12/09/16 17:53	12/11/16 19:01	1
Benzene	<0.0022		0.0022	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Bromoform	<0.0022		0.0022	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
2-Butanone (MEK)	<0.0056		0.0056	0.0025	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Carbon disulfide	<0.0056		0.0056	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Chlorobenzene	<0.0022		0.0022	0.00082	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Chloroethane	<0.0056		0.0056	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Chloroform	<0.0022		0.0022	0.00077	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Chloromethane	<0.0056		0.0056	0.0022	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Dibromochloromethane	<0.0022		0.0022	0.00073	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,1-Dichloroethane	<0.0022		0.0022	0.00076	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,2-Dichloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,1-Dichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00078	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
2-Hexanone	<0.0056		0.0056	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Methylene Chloride	<0.0056		0.0056	0.0022	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Styrene	<0.0022		0.0022	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Tetrachloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00098	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00078	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00095	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Trichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Vinyl acetate	<0.0056		0.0056	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Vinyl chloride	<0.0022		0.0022	0.00098	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1
Xylenes, Total	<0.0044		0.0044	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/09/16 17:53	12/11/16 19:01	1
4-Bromofluorobenzene (Surr)	111		70 - 120	12/09/16 17:53	12/12/16 16:47	1
Dibromofluoromethane	99		75 - 120	12/09/16 17:53	12/11/16 19:01	1
Dibromofluoromethane	97		75 - 120	12/09/16 17:53	12/12/16 16:47	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/09/16 17:53	12/11/16 19:01	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/09/16 17:53	12/12/16 16:47	1
Toluene-d8 (Surr)	105		75 - 123	12/09/16 17:53	12/11/16 19:01	1
Toluene-d8 (Surr)	108		75 - 123	12/09/16 17:53	12/12/16 16:47	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B01 (0-1)

Lab Sample ID: 500-121261-19

Date Collected: 12/08/16 16:55

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 85.9

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 16:30	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Hexachlorocyclopentadiene	<0.75	F1	0.75	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,4-Dinitrophenol	<0.75	*	0.75	0.65	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Phenanthrene	0.053		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Anthracene	0.011	J	0.037	0.0062	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B01 (0-1)

Lab Sample ID: 500-121261-19

Date Collected: 12/08/16 16:55

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.12		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Pyrene	0.10		0.037	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Benzo[a]anthracene	0.055		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Chrysene	0.062		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
3,3'-Dichlorobenzidine	<0.19	F1 F2	0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Benzo[b]fluoranthene	0.11		0.037	0.0080	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Benzo[k]fluoranthene	0.039		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Benzo[a]pyrene	0.074		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Indeno[1,2,3-cd]pyrene	0.039		0.037	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Benzo[g,h,i]perylene	0.029	J	0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		40 - 130				12/19/16 16:12	12/20/16 16:30	1
Phenol-d5	84		36 - 123				12/19/16 16:12	12/20/16 16:30	1
Nitrobenzene-d5	75		33 - 124				12/19/16 16:12	12/20/16 16:30	1
2-Fluorobiphenyl	73		42 - 115				12/19/16 16:12	12/20/16 16:30	1
2,4,6-Tribromophenol	62		25 - 130				12/19/16 16:12	12/20/16 16:30	1
Terphenyl-d14	95		25 - 150				12/19/16 16:12	12/20/16 16:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.22	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Arsenic	3.9		0.54	0.25	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Barium	81		0.54	0.098	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Beryllium	0.49		0.21	0.046	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Boron	3.3	F1	2.7	0.37	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Cadmium	0.23		0.11	0.031	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Calcium	8900	B	11	3.4	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Chromium	13	B	0.54	0.092	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Cobalt	4.8		0.27	0.060	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Copper	12		0.54	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Iron	12000		11	4.1	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Lead	26	F2	0.27	0.13	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Magnesium	2800		5.4	2.2	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Manganese	410		0.54	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Nickel	11		0.54	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Potassium	570		27	4.4	mg/Kg	☼	12/14/16 15:50	12/18/16 21:22	1
Selenium	0.28	J F1	0.54	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Sodium	290		54	7.1	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Thallium	0.66		0.54	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Vanadium	20		0.27	0.078	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1
Zinc	45	F1	1.1	0.34	mg/Kg	☼	12/14/16 15:50	12/16/16 23:05	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121261-4

Client Sample ID: 1314V3-11-B01 (0-1)

Lab Sample ID: 500-121261-19

Date Collected: 12/08/16 16:55

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 85.9

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		12/15/16 08:57	12/16/16 00:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:55	1
Boron	0.074	J	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:55	1
Cadmium	0.0021	J	0.0050	0.0020	mg/L		12/15/16 08:57	12/16/16 00:55	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:55	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:55	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 08:57	12/16/16 00:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/19/16 08:53	12/19/16 23:15	1
Manganese	0.90		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:55	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:55	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/16/16 00:55	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:55	1
Zinc	0.048	J	0.50	0.020	mg/L		12/15/16 08:57	12/16/16 00:55	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		12/14/16 14:09	12/16/16 18:27	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		12/15/16 08:57	12/15/16 19:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 19:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/15/16 13:00	12/16/16 11:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065	B	0.018	0.0095	mg/Kg	☼	12/14/16 16:00	12/15/16 12:51	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 16:12	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121261-4

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: 500-121261-4

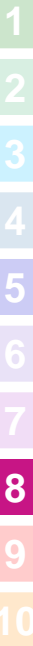
Laboratory: TestAmerica Chicago

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 #: 500-121261

Chain of Custody Number: E84631

Page _____ of _____

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
EE		1009008-0046-01									
Project Name		Lab Project #		Sampling		Total TAC		Total TAC		pH / % Solids	
IT4		50012744		Date Time		meth		meth			
Project Location/State		Lab PM		# of Containers		Matrix					
Rock Island County, IL		D Wright									
Sampler		Sample ID		Date		Time					
S. Cooper											
16	MS/MSD	1314V3-11-B03(0-1)	12-8-16	1615	2	5	X	X	X	X	X
17	MS/MSD	1314V3-11-B03(0-1)	12-8-16	1615	2	5	X	X	X	X	X
18	MS/MSD	1314V3-11-B02(0-1)	12-8-16	1635	2	5	X	X	X	X	X
19	MS/MSD	1314V3-11-B01(0-1)	12-8-16	1655	2	5	X	X	X	X	X
<p><i>[Handwritten signature]</i> 12-8-16</p>											

- 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)

Requested Due Date _____

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<i>[Signature]</i>	EE	12-8-16	1700	<i>[Signature]</i>	TA-CAT	12/9/16	1000
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
 Shipped: Fed-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: 500-121261-4

Login Number: 121261

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	3.6,3.8
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 <6mm (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):

300 block of 19th Street (ISGS #1314V3-17)

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: 41.50974 Longitude: -90.51154

(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 Management Center.

Project Name: FAI 74 (I-74)Latitude: 41.50974 Longitude: -90.51154Uncontaminated 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 1314V3-17-B01 and -B03 were sampled within the construction zone adjacent to ISGS #1314V3-17 (Parking Lot). Refer to PSI Report for ISGS #1314V3-17 (Parking Lot) including Table 4-4, and Figures 4-2 and 4-9.

- 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 J121303-2.

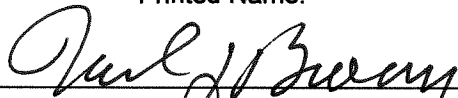
IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

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) 578-9243Neil J. Brown

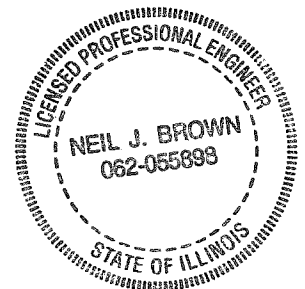
Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

3/17/17

Date:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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

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

 = Concentration exceeds applicable comparison criteria.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-17 (Parking Lot)			Comparison Criteria					
	1314V3-17-B01	1314V3-17-B03		MACs			TACO		
BORING	1314V3-17-B01	1314V3-17-B03 (0-7)	1314V3-17-B03 (0-7)D	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-17-B01 (0-7)	1314V3-17-B03 (0-7)	1314V3-17-B03 (0-7)D						
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-7	0-7	0-7						
pH	7.9	7.6	7.8						
VOCs (None Detected)									
SVOCs (mg/kg)									
2-Methylnaphthalene	0.0084 J	ND U	ND U	--	--	--	--	--	--
Acenaphthene	0.015 J	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.016 J	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.059	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.075	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.11	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.061	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.039	ND U	ND U	9	--	--	9	1,700	--
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.066	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.017 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.12	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.0076 J	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.053	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.0076 J	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.085	ND U	ND U	--	--	--	--	--	--
Pyrene	0.11	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	5.6	5.5	5	11.3	13	--	13	61	--
Barium	74	46	40	1,500	--	--	5,500	14,000	--
Beryllium	0.4	0.38	0.37	22	--	--	160	410	--
Boron	3.4	1.8 J	1.8 J	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	5.2	--	--	78	200	--
Calcium	19,000	7,200	9,000	--	--	--	--	--	--
Chromium	12	10	10	21	--	--	230	690	--
Cobalt	8	6.6	5.8	20	--	--	4,700	12,000	--
Copper	17	8.1	8.3	2,900	--	--	2,900	8,200	--
Iron	14,000	11,000	11,000	15,000	15,900	--	--	--	--
Lead	41	7.5	7.5	107	--	--	400	700	--
Magnesium	9,600	4,500	5,600	325,000	--	--	--	730,000	--
Manganese	460	290	190	630	636	--	1,600	4,100	--
Mercury	0.047	0.014 J	0.022	0.89	--	--	10	0.1	--
Nickel	18	13	12	100	--	--	1,600	4,100	--
Potassium	780	440	450	--	--	--	--	--	--
Selenium	ND U	ND U	ND U	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	240	570	570	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	18	19	18	550	--	--	550	1,400	--
Zinc	64	28	29	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.7	0.49 J	0.45 J	--	--	--	--	--	2
Boron	0.079 J	0.06 J	0.051 J	--	--	--	--	--	2
Cadmium	0.0026 J	ND U	ND U	--	--	--	--	--	0.005
Cobalt	0.018 J	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	5.4 L	0.56 L	0.58 L	--	--	--	--	--	0.15
Nickel	0.036	ND U	ND U	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.062 J	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)									
Lead	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.055	0.78 L	1.2 J 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: 500-121303-2
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:
12/27/2016 1:14:16 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.

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Case Narrative

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

TestAmerica Job ID: 500-121303-2

Job ID: 500-121303-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121303-2

Comments

No additional comments.

Receipt

The samples were received on 12/10/2016 7:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° C.

GC/MS VOA

Method(s) 8260B: Surrogate recoveries were outside of acceptance limits for the following samples: 1314V3-17-B01 (0-7) (500-121303-5) and 1314V3-17-B02 (0-7) (500-121303-6). Re-analysis was performed with surrogate recoveries having concurring results. The best data were reported.

1314V3-17-B01 (0-7) (500-121303-5) and 1314V3-17-B02 (0-7) (500-121303-6)

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

GC/MS Semi VOA

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121303-E-2-I MS) and (500-121303-E-2-J MSD)

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 500-366006 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-366006/2-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 following sample was diluted due to the nature of the sample matrix: 1314V3-17-B02 (0-7) (500-121303-6). Elevated reporting limits (RLs) are provided.

Method(s) 6010B:

Method(s) 6010B: The laboratory blank (LB) for preparation batch 500-365093 and 500-365312 contained Lead above the reporting limit (RL). The samples 1314V3-17-B01 (0-7) (500-121303-5), 1314V3-17-B03 (0-7) (500-121303-7), 1314V3-17-B03 (0-7)D (500-121303-8) and (500-121303-E-13-F) 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: 500-121303-2

Client Sample ID: 1314V3-17-B01 (0-7)

Lab Sample ID: 500-121303-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0076	J	0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0084	J	0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.015	J	0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0076	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.085		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.016	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.12		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.11		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.059		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.066		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.11		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.039		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.075		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.053		0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.017	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.061		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.6		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	74		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	3.4		2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28	B	0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000	B	11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.55	0.094	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.0		0.27	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	41		0.27	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9600		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	18		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	780		27	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	240		55	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.27	0.080	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.079	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	5.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.062	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.055		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.047		0.019	0.0099	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

Detection Summary

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)

Lab Sample ID: 500-121303-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.5		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	7200	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	10		0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.6		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	8.1		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	7.5		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4500		5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	440		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	570		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.060	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.56		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.78		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.014	J	0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-17-B03 (0-7)D

Lab Sample ID: 500-121303-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.0		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.53	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.37		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	0.091	J B	0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	9000	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	10		0.53	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	8.3		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.5		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5600		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	190		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	450		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54	B	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	570		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	29		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	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: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)D (Continued)

Lab Sample ID: 500-121303-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.58		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.2	F1	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.017	0.0091	mg/Kg	1	*	7471B	Total/NA
pH	7.8		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: 500-121303-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121303-5	1314V3-17-B01 (0-7)	Solid	12/09/16 09:20	12/10/16 07:15
500-121303-7	1314V3-17-B03 (0-7)	Solid	12/09/16 09:50	12/10/16 07:15
500-121303-8	1314V3-17-B03 (0-7)D	Solid	12/09/16 09:50	12/10/16 07:15

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Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B01 (0-7)

Lab Sample ID: 500-121303-5

Date Collected: 12/09/16 09:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.013		0.013	0.0059	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Benzene	<0.0013		0.0013	0.00034	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Bromodichloromethane	<0.0013		0.0013	0.00027	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Bromoform	<0.0013		0.0013	0.00039	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Bromomethane	<0.0034		0.0034	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
2-Butanone (MEK)	<0.0034		0.0034	0.0015	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Carbon disulfide	<0.0034		0.0034	0.00070	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Carbon tetrachloride	<0.0013		0.0013	0.00039	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Chlorobenzene	<0.0013		0.0013	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Chloroethane	<0.0034		0.0034	0.00099	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Chloroform	<0.0013		0.0013	0.00047	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Chloromethane	<0.0034		0.0034	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
cis-1,2-Dichloroethene	<0.0013		0.0013	0.00038	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
cis-1,3-Dichloropropene	<0.0013		0.0013	0.00041	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Dibromochloromethane	<0.0013		0.0013	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,1-Dichloroethane	<0.0013		0.0013	0.00046	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,2-Dichloroethane	<0.0034		0.0034	0.0010	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,1-Dichloroethene	<0.0013		0.0013	0.00046	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,2-Dichloropropane	<0.0013		0.0013	0.00035	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,3-Dichloropropane, Total	<0.0013		0.0013	0.00047	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Ethylbenzene	<0.0013		0.0013	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
2-Hexanone	<0.0034		0.0034	0.0010	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Methylene Chloride	<0.0034		0.0034	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
4-Methyl-2-pentanone (MIBK)	<0.0034		0.0034	0.00099	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Methyl tert-butyl ether	<0.0013		0.0013	0.00039	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Styrene	<0.0013		0.0013	0.00041	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,1,2,2-Tetrachloroethane	<0.0013		0.0013	0.00043	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Tetrachloroethene	<0.0013		0.0013	0.00046	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Toluene	<0.0013		0.0013	0.00034	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
trans-1,2-Dichloroethene	<0.0013		0.0013	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
trans-1,3-Dichloropropene	<0.0013		0.0013	0.00047	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,1,1-Trichloroethane	<0.0013		0.0013	0.00045	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
1,1,2-Trichloroethane	<0.0013		0.0013	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Trichloroethene	<0.0013		0.0013	0.00045	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Vinyl acetate	<0.0034		0.0034	0.0012	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Vinyl chloride	<0.0013		0.0013	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1
Xylenes, Total	<0.0027		0.0027	0.00043	mg/Kg	☼	12/10/16 08:55	12/12/16 21:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 120	12/10/16 08:55	12/12/16 21:04	1
Dibromofluoromethane	121	X	75 - 120	12/10/16 08:55	12/12/16 21:04	1
1,2-Dichloroethane-d4 (Surr)	130		69 - 134	12/10/16 08:55	12/12/16 21:04	1
Toluene-d8 (Surr)	112		75 - 123	12/10/16 08:55	12/12/16 21:04	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	☼	12/20/16 16:13	12/21/16 13:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B01 (0-7)

Lab Sample ID: 500-121303-5

Date Collected: 12/09/16 09:20

Matrix: Solid

Date Received: 12/10/16 07:15

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	<0.19		0.19	0.046	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Naphthalene	0.0076	J	0.038	0.0059	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2-Methylnaphthalene	0.0084	J	0.077	0.0070	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,4-Dinitrophenol	<0.77	*	0.77	0.67	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Acenaphthene	0.015	J	0.038	0.0069	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Fluorene	0.0076	J	0.038	0.0054	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Phenanthrene	0.085		0.038	0.0053	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Anthracene	0.016	J	0.038	0.0064	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Fluoranthene	0.12		0.038	0.0071	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Pyrene	0.11		0.038	0.0076	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Benzo[a]anthracene	0.059		0.038	0.0052	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B01 (0-7)

Lab Sample ID: 500-121303-5

Date Collected: 12/09/16 09:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.066		0.038	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Benzo[b]fluoranthene	0.11		0.038	0.0083	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Benzo[k]fluoranthene	0.039		0.038	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Benzo[a]pyrene	0.075		0.038	0.0074	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Indeno[1,2,3-cd]pyrene	0.053		0.038	0.0099	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Dibenz(a,h)anthracene	0.017	J	0.038	0.0074	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
Benzo[g,h,i]perylene	0.061		0.038	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		40 - 130	12/20/16 16:13	12/21/16 13:32	1
Phenol-d5	77		36 - 123	12/20/16 16:13	12/21/16 13:32	1
Nitrobenzene-d5	80		33 - 124	12/20/16 16:13	12/21/16 13:32	1
2-Fluorobiphenyl	79		42 - 115	12/20/16 16:13	12/21/16 13:32	1
2,4,6-Tribromophenol	79		25 - 130	12/20/16 16:13	12/21/16 13:32	1
Terphenyl-d14	95		25 - 150	12/20/16 16:13	12/21/16 13:32	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	☼	12/15/16 09:32	12/15/16 18:18	1
Arsenic	5.6		0.55	0.25	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Barium	74		0.55	0.10	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Beryllium	0.40		0.22	0.048	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Boron	3.4		2.7	0.38	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Cadmium	0.28	B	0.11	0.032	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Calcium	19000	B	11	3.5	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Chromium	12		0.55	0.094	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Cobalt	8.0		0.27	0.062	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Copper	17		0.55	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Iron	14000	B	11	4.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Lead	41		0.27	0.14	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Magnesium	9600		5.5	2.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Manganese	460		0.55	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Nickel	18		0.55	0.15	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Potassium	780		27	4.5	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Sodium	240		55	7.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Vanadium	18		0.27	0.080	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1
Zinc	64		1.1	0.35	mg/Kg	☼	12/15/16 09:32	12/15/16 18:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 15:58	1
Boron	0.079	J	0.50	0.050	mg/L		12/15/16 15:03	12/20/16 15:58	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B01 (0-7)

Lab Sample ID: 500-121303-5

Date Collected: 12/09/16 09:20

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.2

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	-	12/15/16 15:03	12/20/16 15:58	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Cobalt	0.018	J	0.025	0.010	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Manganese	5.4		0.025	0.010	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Nickel	0.036		0.025	0.010	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 15:03	12/20/16 15:58	1
Zinc	0.062	J	0.50	0.020	mg/L	-	12/15/16 15:03	12/20/16 15:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.055		0.025	0.010	mg/L	-	12/15/16 14:57	12/19/16 20:48	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 15:03	12/16/16 17:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 15:03	12/16/16 17:56	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 09:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.019	0.0099	mg/Kg	☼	12/15/16 17:00	12/16/16 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		12/16/16 15:54	1

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)

Lab Sample ID: 500-121303-7

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

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	☼	12/10/16 08:55	12/12/16 21:56	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 21:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/10/16 08:55	12/12/16 21:56	1
Dibromofluoromethane	120		75 - 120	12/10/16 08:55	12/12/16 21:56	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/10/16 08:55	12/12/16 21:56	1
Toluene-d8 (Surr)	109		75 - 123	12/10/16 08:55	12/12/16 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)

Lab Sample ID: 500-121303-7

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

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	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,4-Dinitrophenol	<0.76 *		0.76	0.66	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)

Lab Sample ID: 500-121303-7

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/20/16 16:13	12/21/16 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/20/16 16:13	12/21/16 14:00	1
Phenol-d5	74		36 - 123	12/20/16 16:13	12/21/16 14:00	1
Nitrobenzene-d5	77		33 - 124	12/20/16 16:13	12/21/16 14:00	1
2-Fluorobiphenyl	74		42 - 115	12/20/16 16:13	12/21/16 14:00	1
2,4,6-Tribromophenol	81		25 - 130	12/20/16 16:13	12/21/16 14:00	1
Terphenyl-d14	95		25 - 150	12/20/16 16:13	12/21/16 14:00	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	☼	12/15/16 09:32	12/15/16 18:26	1
Arsenic	5.5		0.58	0.27	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Barium	46		0.58	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Beryllium	0.38		0.23	0.050	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Boron	1.8 J		2.9	0.40	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Cadmium	0.12 B		0.12	0.033	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Calcium	7200 B		12	3.7	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Chromium	10		0.58	0.099	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Cobalt	6.6		0.29	0.065	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Copper	8.1		0.58	0.13	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Iron	11000 B		12	4.5	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Lead	7.5		0.29	0.14	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Magnesium	4500		5.8	2.3	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Manganese	290		0.58	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Nickel	13		0.58	0.16	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Potassium	440		29	4.7	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Selenium	0.41 J B		0.58	0.29	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Sodium	570		58	7.6	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Thallium	<0.58		0.58	0.28	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Vanadium	19		0.29	0.084	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	1
Zinc	28		1.2	0.37	mg/Kg	☼	12/15/16 09:32	12/15/16 18:26	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		12/15/16 15:03	12/20/16 16:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 16:12	1
Boron	0.060 J		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 16:12	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)

Lab Sample ID: 500-121303-7

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

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		12/15/16 15:03	12/20/16 16:12	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:12	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:12	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 16:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 16:12	1
Manganese	0.56		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:12	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:12	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 16:12	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:12	1
Zinc	<0.50		0.50	0.020	mg/L		12/15/16 15:03	12/20/16 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.78		0.025	0.010	mg/L		12/15/16 14:57	12/19/16 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/15/16 15:03	12/16/16 18:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 18:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/15/16 13:00	12/16/16 09:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.018	0.0096	mg/Kg	☼	12/15/16 17:00	12/16/16 10:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/16/16 15:59	1

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)D

Lab Sample ID: 500-121303-8

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/10/16 08:55	12/12/16 22:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/10/16 08:55	12/12/16 22:22	1
Dibromofluoromethane	119		75 - 120	12/10/16 08:55	12/12/16 22:22	1
1,2-Dichloroethane-d4 (Surr)	128		69 - 134	12/10/16 08:55	12/12/16 22:22	1
Toluene-d8 (Surr)	108		75 - 123	12/10/16 08:55	12/12/16 22:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)D

Lab Sample ID: 500-121303-8

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

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	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)D

Lab Sample ID: 500-121303-8

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/20/16 16:13	12/21/16 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		40 - 130	12/20/16 16:13	12/21/16 15:52	1
Phenol-d5	72		36 - 123	12/20/16 16:13	12/21/16 15:52	1
Nitrobenzene-d5	73		33 - 124	12/20/16 16:13	12/21/16 15:52	1
2-Fluorobiphenyl	71		42 - 115	12/20/16 16:13	12/21/16 15:52	1
2,4,6-Tribromophenol	72		25 - 130	12/20/16 16:13	12/21/16 15:52	1
Terphenyl-d14	94		25 - 150	12/20/16 16:13	12/21/16 15:52	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	☼	12/15/16 09:32	12/15/16 18:30	1
Arsenic	5.0		0.53	0.25	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Barium	40		0.53	0.098	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Beryllium	0.37		0.21	0.046	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Boron	1.8 J		2.7	0.37	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Cadmium	0.091 J B		0.11	0.031	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Calcium	9000 B		11	3.4	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Chromium	10		0.53	0.092	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Cobalt	5.8		0.27	0.060	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Copper	8.3		0.53	0.12	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Iron	11000 B		11	4.1	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Lead	7.5		0.27	0.13	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Magnesium	5600		5.3	2.2	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Manganese	190		0.53	0.11	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Nickel	12		0.53	0.14	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Potassium	450		27	4.4	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Selenium	0.54 B		0.53	0.26	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Sodium	570		53	7.0	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Vanadium	18		0.27	0.078	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1
Zinc	29		1.1	0.34	mg/Kg	☼	12/15/16 09:32	12/15/16 18:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45 J		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 16:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 15:03	12/20/16 16:18	1
Boron	0.051 J		0.50	0.050	mg/L		12/15/16 15:03	12/20/16 16:18	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121303-2

Client Sample ID: 1314V3-17-B03 (0-7)D

Lab Sample ID: 500-121303-8

Date Collected: 12/09/16 09:50

Matrix: Solid

Date Received: 12/10/16 07:15

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		12/15/16 15:03	12/20/16 16:18	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:18	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:18	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 15:03	12/20/16 16:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 15:03	12/20/16 16:18	1
Manganese	0.58		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:18	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:18	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 15:03	12/20/16 16:18	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 15:03	12/20/16 16:18	1
Zinc	<0.50		0.50	0.020	mg/L		12/15/16 15:03	12/20/16 16:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.2	F1	0.025	0.010	mg/L		12/15/16 14:57	12/19/16 21:09	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 15:03	12/16/16 18:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 15:03	12/16/16 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 09:54	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	☼	12/15/16 17:00	12/16/16 10:17	1

General Chemistry

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

Definitions/Glossary

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

TestAmerica Job ID: 500-121303-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

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

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.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 500-121303-2

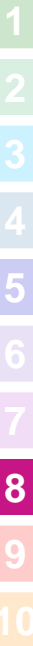
Laboratory: TestAmerica Chicago

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

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 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-121303
 Chain of Custody Number: EE4633
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative							Preservative Key	
Project Name		Parameter										
Project Location/State		Lab Project #										
Sampler		Lab PM										
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix						Comments
			Date	Time								
5		1314V3-17-B01(0-7)	12-9-16	0920	2 S		VOC	SVOC	Total PAH Metals	2-CUP PAH Metals	PM10 Solid	
6		1314V3-17-B02(0-7)	12-9-16	0935	2 S		X	X	X	X	X	64C08
7		1314V3-17-D03(0-7)	12-9-16	0950	2 S		X	X	X	X	X	
8		1314V3-17-D03(0-7) D	12-9-16	0950	2 S		X	X	X	X	X	
2/12-9-16												

- 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: <u>[Signature]</u>	Company: <u>EE</u>	Date: <u>12-9-16</u>	Time: <u>1530</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>12/9/16</u>	Time: <u>1530</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>12/9/16</u>	Time: <u>1800</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>12/10/16</u>	Time: <u>0715</u>

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: 500-121303-2

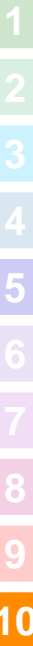
Login Number: 121303

List Source: TestAmerica Chicago

List Number: 1

Creator: James, Jeff A

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	4.0
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	





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):

1900-2100 blocks of River Drive (ISGS #1314V3-18)

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: 41.51053 Longitude: -90.50987

(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 Management Center.

Project Name: FAI 74 (I-74)Latitude: 41.51053 Longitude: -90.50987Uncontaminated 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 1314V3-18-B01, -B02, -B03, -B04, -B05, -B06, -B07, and -B08 were sampled within the construction zone adjacent to ISGS #1314V3-18 (Vacant Land). Refer to PSI Report for ISGS #1314V3-18 (Vacant Land) including Table 4-4, and Figure 4-2, 4-9, and 4-10.

- 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 J121504-3 and J121505-1.

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

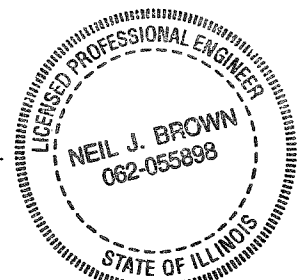
Neil J. Brown

Printed Name:




Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Date:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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 64C08 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-18 (Vacant Land)						Comparison Criteria					
	1314V3-18-B01			1314V3-18-B02			MACs			TACO		
BORING	1314V3-18-B01 (0-6)	1314V3-18-B01 (6-12)	1314V3-18-B01 (12-18)	1314V3-18-B02 (0-7)	1314V3-18-B02 (0-7)D	1314V3-18-B02 (7-13)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	0-7	0-7	7-13						
DEPTH (feet)	8.7	8.3	7.9	8	8	7.7						
PH												
VOCs (mg/kg)												
2-Butanone (MEK)	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Acetone	ND U	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)												
2-Methylnaphthalene	0.059 J	0.019 J	0.0081 J	ND U	ND U	ND U	--	--	--	--	--	--
3 & 4 Methylphenol	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	0.012 J	0.009 J	ND U	ND U	ND U	0.0087 J	--	--	--	--	--	--
Anthracene	0.019 J	0.016 J	0.012 J	ND U	ND U	0.0067 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.047	0.037	0.025 J	0.0059 J	0.0093 J	0.092	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.052	0.034 J	0.026 J	ND U	0.011 J	0.094 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.085	0.061	0.037	0.011 J	0.016 J	0.12	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.025 J	0.018 J	0.012 J	ND UJ	ND U	0.053	--	--	--	--	--	--
Benzo(k)fluoranthene	0.03 J	0.019 J	ND U	ND U	ND U	0.061	9	--	--	9	1,700	--
Carbazole	ND U	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.056	0.048	0.032 J	ND U	0.012 J	0.089	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND UJ	ND U	0.013 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.088	0.068	0.064	0.012 J	0.02 J	0.15	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	0.006 J	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.021 J	0.015 J	0.01 J	ND U	ND U	0.047	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.039	0.011 J	0.0068 J	ND U	ND U	0.0063 J	1.8	--	--	170	1.8	--
Phenanthrene	0.089	0.069	0.055	ND U	0.0078 J	0.026 J	--	--	--	--	--	--
Pyrene	0.086	0.074	0.068	0.0096 J	0.017 J	0.15	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)												
Antimony	0.33 J	0.39 J	0.31 J	0.58 J	0.61 J	0.47 J	5	--	--	31	82	--
Arsenic	4.5	6.2	6	4	4.6	5.8	11.3	13	--	13	61	--
Barium	52	52	39	78	71	64	1,500	--	--	5,500	14,000	--
Beryllium	0.5	0.46	0.39	0.59	0.59	0.63	22	--	--	160	410	--
Boron	4.6	6.2	2.8	2.5	2.6	4.8	40	--	--	16,000	41,000	--
Cadmium	0.2	0.2	0.13	ND U	ND U	0.076 J	5.2	--	--	78	200	--
Calcium	80,000	54,000	35,000	14,000	15,000	4,500	--	--	--	--	--	--
Chromium	11	10	9.7	15	15	14	21	--	--	230	690	--
Cobalt	5.4	4.6	5.7	5.8	6.5	6.6	20	--	--	4,700	12,000	--
Copper	15	15	11	12	13	14	2,900	--	--	2,900	8,200	--
Iron	13,000	13,000	13,000	15,000	16,000 †m	15,000	15,000	15,900	--	--	--	--
Lead	19	17	9.5	9.1	10	19	107	--	--	400	700	--
Magnesium	19,000	18,000	18,000	8,100	8,600	1,700	325,000	--	--	--	730,000	--
Manganese	370	320	290	290	310	390	630	636	--	1,600	4,100	--
Mercury	0.039	0.02	0.016 J	0.029	0.025	0.05	0.89	--	--	10	0.1	--
Nickel	13	11	13	14	15	15	100	--	--	1,600	4,100	--
Potassium	930	760	760	780 J	810	900	--	--	--	--	--	--
Selenium	0.34 J	0.37 J	0.62	0.46 J	0.5 J	0.57	1.3	--	--	390	1,000	--
Sodium	340	710	460	100	110	94	--	--	--	--	--	--
Thallium	0.89	0.76	0.86	0.98	0.92	1	2.6	--	--	6.3	160	--
Vanadium	19	18	16	26	26	24	550	--	--	550	1,400	--
Zinc	51	78	33	32	36	56	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)												
Barium	0.76	0.81	1	0.68	0.73	0.48 J	--	--	--	--	--	2
Boron	ND U	ND U	ND U	0.054 J	0.062 J	0.12 J	--	--	--	--	--	2
Cadmium	0.003 J	0.0047 J	0.0038 J	0.0022 J	0.0021 J	0.0022 J	--	--	--	--	--	0.005
Cobalt	ND U	0.032	0.024 J	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.5 L	6.3 L	7.8 L	0.66 L	0.55 L	0.26 L	--	--	--	--	--	0.15
Nickel	0.013 J	0.041	0.032	ND U	ND U	ND U	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Thallium	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.002
Zinc	0.076 J	0.096 J	0.021 J	0.035 J	ND U	0.14 J	--	--	--	--	--	5
SPLP Metals (mg/L)												
Cadmium	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.36 L	0.72 L	0.23 L	0.13	0.15	0.074	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-18 (Vacant Land)					Comparison Criteria					
	1314V3-18-B06			1314V3-18-B07	1314V3-18-B08	MACs			TACO		
SAMPLE	1314V3-18-B06 (0-6)	1314V3-18-B06 (6-12)	1314V3-18-B06 (12-17)	1314V3-18-B07 (0-8)	1314V3-18-B08 (0-4.4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-17	0-8	0-4.4						
pH	8.4	7.9	8	8.5	8.4						
VOCs (mg/kg)											
2-Butanone (MEK)	ND U	ND U	ND U	ND U	0.011	--	--	--	--	--	--
Acetone	ND U	ND U	0.021	ND U	0.051	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
2-Methylnaphthalene	0.21	0.23	0.0091 J	0.007 J	0.066 J	--	--	--	--	--	--
3 & 4 Methylphenol	ND U	ND U	ND U	ND U	0.29	--	--	--	--	--	--
Acenaphthene	0.041	0.0072 J	ND U	ND U	0.012 J	570	--	--	4,700	120,000	--
Acenaphthylene	0.19	0.02 J	ND U	ND U	0.0071 J	--	--	--	--	--	--
Anthracene	0.46	0.03 J	ND U	ND U	0.041	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.91	0.09	ND U	0.018 J	0.13	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.72	0.084	ND U	0.02 J	0.13	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.94	0.14	ND U	0.026 J	0.22	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.25	0.043	ND U	ND U	0.054	--	--	--	--	--	--
Benzo(k)fluoranthene	0.43	0.057	ND U	ND U	0.072	9	--	--	9	1,700	--
Carbazole	0.19	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.82	0.12	ND U	0.021 J	0.15	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.077	0.012 J	ND U	ND U	0.015 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	0.17 J	0.076 J	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	1.9	0.18	ND U	0.035 J	0.3	3,100	--	--	3,100	82,000	--
Fluorene	0.099	0.0089 J	ND U	ND U	0.013 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.24	0.036 J	ND U	ND U	0.051	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.13	0.17	ND U	ND U	0.033 J	1.8	--	--	170	1.8	--
Phenanthrene	1.6	0.22	0.0072 J	0.031 J	0.22	--	--	--	--	--	--
Pyrene	1.6	0.17	ND U	0.035 J	0.25	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.54 J	0.62 J	0.27 J	0.27 J	0.44 J	5	--	--	31	82	--
Arsenic	5.6	7.3	2.5	3.5	2.3	11.3	13	--	13	61	--
Barium	63	76	49	48	40	1,500	--	--	5,500	14,000	--
Beryllium	0.55	0.68	0.41	0.52	0.77	22	--	--	160	410	--
Boron	7.1	14	2 J	6.4	17	40	--	--	16,000	41,000	--
Cadmium	0.42	0.32	ND U	ND U	0.11	5.2	--	--	78	200	--
Calcium	28,000	14,000	3,300	110,000	6,700	--	--	--	--	--	--
Chromium	12	11	10	13	7.3	21	--	--	230	690	--
Cobalt	4.7	5.6	4.5	4.4	2.3	20	--	--	4,700	12,000	--
Copper	17	19	8.1	12	7.8	2,900	--	--	2,900	8,200	--
Iron	13,000	20,000 †m	10,000	12,000	11,000	15,000	15,900	--	--	--	--
Lead	23	39	6.6	16	9.2	107	--	--	400	700	--
Magnesium	14,000	4,300	1,800	30,000	1,000	325,000	--	--	--	730,000	--
Manganese	280	220	210	320	110	630	636	--	1,600	4,100	--
Mercury	0.045	0.19	0.014 J	0.016 J	0.033	0.89	--	--	10	0.1	--
Nickel	12	13	9.3	11	6.6	100	--	--	1,600	4,100	--
Potassium	850	790	580	1,000	410	--	--	--	--	--	--
Selenium	0.45	0.93	0.37 J	ND U	0.58	1.3	--	--	390	1,000	--
Sodium	560	270	110	480	340	--	--	--	--	--	--
Thallium	1	1	0.7	0.95	0.3 J	2.6	--	--	6.3	160	--
Vanadium	20	19	16	19	9.7	550	--	--	550	1,400	--
Zinc	86	120	24	24	71	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.7	0.83	1.3	0.66	0.63	--	--	--	--	--	2
Boron	ND U	ND U	ND U	0.082 J	0.1 J	--	--	--	--	--	2
Cadmium	0.0042 J	0.0079 L	0.0023 J	ND U	0.0048 J	--	--	--	--	--	0.005
Cobalt	ND U	0.048	0.032	0.012 J	0.031	--	--	--	--	--	1
Iron	ND U	0.84	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	0.015 L	ND U	ND U	0.012 L	--	--	--	--	--	0.0075
Manganese	1.4 L	9.1 L	14 L	2.9 L	4.7 L	--	--	--	--	--	0.15
Nickel	0.01 J	0.047	0.041	0.026	0.04	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Thallium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.002
Zinc	0.16 J	0.35 J	0.062 J	0.041 J	0.34 J	--	--	--	--	--	5
SPLP Metals (mg/L)											
Cadmium	NA	ND U	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	0.03 L	NA	NA	0.092 L	--	--	--	--	--	0.0075
Manganese	0.34 L	0.14	0.17 L	ND U	0.65 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: 500-121504-3
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:
12/29/2016 12:52:21 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.

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Case Narrative

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

TestAmerica Job ID: 500-121504-3

Job ID: 500-121504-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121504-3

Comments

No additional comments.

Receipt

The samples were received on 12/15/2016 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 3.1° C and 5.0° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for 3655926 recovered outside control limits for the following analytes: Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121504-E-1-T MS) and (500-121504-E-1-U 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 interference check standard solution (ICSA) associated with batch 500-366456 had results for Cadmium above the control limit. The laboratory blank (MB), laboratory control sample (LCS), and all other QC were within control limits. The associated samples had results below the reporting limit (RL) for Cadmium, therefore the data have been reported.

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

General Chemistry

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

Organic Prep

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

Detection Summary

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.13		0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.21		0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.19		0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.041		0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.17	J	0.18	0.043	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.099		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	1.6		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.46		0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.19		0.18	0.091	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.9		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	1.6		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.91		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.82		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.94		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.43		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.72		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.24		0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.077		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.25		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.54	J	0.89	0.18	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.6		0.44	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	63		0.44	0.081	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.18	0.038	mg/Kg	1	☼	6010B	Total/NA
Boron	7.1		2.2	0.31	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.42		0.089	0.026	mg/Kg	1	☼	6010B	Total/NA
Calcium	28000	B	8.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.44	0.076	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.7		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.44	0.096	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	8.9	3.4	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.22	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000		4.4	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	280	B	0.44	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.44	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	850		22	3.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45		0.44	0.22	mg/Kg	1	☼	6010B	Total/NA
Sodium	560		44	5.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.44	0.22	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.22	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	86		0.89	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0042	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.16	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.34		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.045		0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		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: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.17		0.037	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.23		0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.020	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0072	J	0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.076	J	0.19	0.044	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0089	J	0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.22		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.030	J	0.037	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.18		0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.17		0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.090		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.12		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.14		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.057		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.084		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.036	J	0.037	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.012	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.043		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.62	J	0.96	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.48	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	76		0.48	0.088	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.19	0.042	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.4	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.32		0.096	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000	B	9.6	3.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.48	0.083	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.6		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	9.6	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	39		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4300		4.8	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	220	B	0.48	0.095	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	790		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.93		0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	270		48	6.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.24	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		0.96	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.83		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0079		0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.84		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.015		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	9.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.047		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.35	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.030		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.14		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: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12) (Continued)

Lab Sample ID: 500-121504-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.19		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.0091	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.0072	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.27	J	0.92	0.19	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.5		0.46	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	49		0.46	0.085	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.18	0.040	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	2.3	0.32	mg/Kg	1	☼	6010B	Total/NA
Calcium	3300	B	9.2	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.46	0.079	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.5		0.23	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	8.1		0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	9.2	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	6.6		0.23	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		4.6	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	210	B	0.46	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.3		0.46	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	580		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	110		46	6.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.70		0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.23	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	24		0.92	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	1.3		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	14		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.062	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.014	J	0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.039		0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.059	J	0.073	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.012	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.089		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.019	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.088		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.086		0.036	0.0072	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: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6) (Continued)

Lab Sample ID: 500-121504-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	0.047		0.036	0.0049	mg/Kg	1	*	☼	8270D	Total/NA
Chrysene	0.056		0.036	0.0099	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.085		0.036	0.0079	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.030	J	0.036	0.011	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[a]pyrene	0.052		0.036	0.0070	mg/Kg	1	*	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.036	0.0094	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.036	0.012	mg/Kg	1	*	☼	8270D	Total/NA
Antimony	0.33	J	1.0	0.21	mg/Kg	1	*	☼	6010B	Total/NA
Arsenic	4.5		0.51	0.23	mg/Kg	1	*	☼	6010B	Total/NA
Barium	52		0.51	0.093	mg/Kg	1	*	☼	6010B	Total/NA
Beryllium	0.50		0.20	0.044	mg/Kg	1	*	☼	6010B	Total/NA
Boron	4.6		2.5	0.35	mg/Kg	1	*	☼	6010B	Total/NA
Cadmium	0.20		0.10	0.029	mg/Kg	1	*	☼	6010B	Total/NA
Calcium	80000	B	100	33	mg/Kg	10	*	☼	6010B	Total/NA
Chromium	11	B	0.51	0.087	mg/Kg	1	*	☼	6010B	Total/NA
Cobalt	5.4		0.25	0.057	mg/Kg	1	*	☼	6010B	Total/NA
Copper	15		0.51	0.11	mg/Kg	1	*	☼	6010B	Total/NA
Iron	13000	B	10	3.9	mg/Kg	1	*	☼	6010B	Total/NA
Lead	19		0.25	0.13	mg/Kg	1	*	☼	6010B	Total/NA
Magnesium	19000		5.1	2.1	mg/Kg	1	*	☼	6010B	Total/NA
Manganese	370	B	0.51	0.10	mg/Kg	1	*	☼	6010B	Total/NA
Nickel	13		0.51	0.14	mg/Kg	1	*	☼	6010B	Total/NA
Potassium	930		25	4.1	mg/Kg	1	*	☼	6010B	Total/NA
Selenium	0.34	J	0.51	0.25	mg/Kg	1	*	☼	6010B	Total/NA
Sodium	340		51	6.7	mg/Kg	1	*	☼	6010B	Total/NA
Thallium	0.89		0.51	0.25	mg/Kg	1	*	☼	6010B	Total/NA
Vanadium	19		0.25	0.074	mg/Kg	1	*	☼	6010B	Total/NA
Zinc	51		1.0	0.32	mg/Kg	1	*	☼	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.074	J B	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0030	J ^	0.0050	0.0020	mg/L	1			6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.36		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.039		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: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.011	J	0.037	0.0057	mg/Kg	1	*	☼	8270D	Total/NA
2-Methylnaphthalene	0.019	J	0.074	0.0068	mg/Kg	1	*	☼	8270D	Total/NA
Acenaphthylene	0.0090	J	0.037	0.0049	mg/Kg	1	*	☼	8270D	Total/NA
Phenanthrene	0.069		0.037	0.0051	mg/Kg	1	*	☼	8270D	Total/NA
Anthracene	0.016	J	0.037	0.0062	mg/Kg	1	*	☼	8270D	Total/NA
Fluoranthene	0.068		0.037	0.0068	mg/Kg	1	*	☼	8270D	Total/NA
Pyrene	0.074		0.037	0.0073	mg/Kg	1	*	☼	8270D	Total/NA
Benzo[a]anthracene	0.037		0.037	0.0050	mg/Kg	1	*	☼	8270D	Total/NA
Chrysene	0.048		0.037	0.010	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: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12) (Continued)

Lab Sample ID: 500-121504-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.061		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.019	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.034	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.018	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.39	J	1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.2		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	52		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	6.2		2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.57	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.6		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	760		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	710		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.76		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	78		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.81		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0047	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	6.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.096	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.72		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		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: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0068	J	0.036	0.0055	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0081	J	0.072	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0060	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.055		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.012	J	0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.064		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.068		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.025	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.032	J	0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.037		0.036	0.0078	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: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18) (Continued)

Lab Sample ID: 500-121504-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	0.026	J	0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.010	J	0.036	0.0093	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.012	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.31	J	0.95	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.0		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.47	0.087	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.39		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA
Boron	2.8		2.4	0.33	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13		0.095	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	35000	B	9.5	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.7	B	0.47	0.081	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.7		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	9.5	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	9.5		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		4.7	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	290	B	0.47	0.094	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	760		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.62		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	460		47	6.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.86		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.24	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	33		0.95	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	1.0		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0038	J ^	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	7.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.021	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.23		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	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B05 (0-8)

Lab Sample ID: 500-121504-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.026	J	0.035	0.0049	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0084	J	0.035	0.0058	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.059		0.035	0.0065	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.063		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.059		0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.068		0.035	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.16		0.035	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.087		0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.086		0.035	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.059		0.035	0.0090	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.015	J	0.035	0.0067	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.065		0.035	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: 500-121504-3

Client Sample ID: 1314V3-18-B05 (0-8) (Continued)

Lab Sample ID: 500-121504-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.48	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.2		0.51	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	53		0.51	0.093	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	2.4	J	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Calcium	5000	B	10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.51	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.25	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2600		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	270	B	0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	570		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	89		51	6.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.99		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	38		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J B	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.0079		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.44		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.12	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.042		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.50		0.025	0.010	mg/L	1		6010B	SPLP East
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: 1314V3-18-B05 (8-12)

Lab Sample ID: 500-121504-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.41	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.8		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	29		0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.21	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	1.1	J	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Calcium	13000	B	10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.6	B	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.4		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	2.8		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	6900		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	320		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.55		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		51	6.8	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: 500-121504-3

Client Sample ID: 1314V3-18-B05 (8-12) (Continued)

Lab Sample ID: 500-121504-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.90		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	24		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.038	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.025		0.025	0.010	mg/L	1		6010B	SPLP East
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B03 (0-6)

Lab Sample ID: 500-121504-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.014	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.022	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.021	J	0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0079	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.017	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.025	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.011	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.1		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	60		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	4.5		2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.083	J	0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	38000	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	360	B	0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	980		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	89		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.88		0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA
Zinc	38		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.86		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.36		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.035	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.083		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B03 (6-12)

Lab Sample ID: 500-121504-20

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: 500-121504-3

Client Sample ID: 1314V3-18-B03 (6-12) (Continued)

Lab Sample ID: 500-121504-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Pyrene	0.030	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA	
Chrysene	0.011	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA	
Benzo[b]fluoranthene	0.016	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA	
Antimony	0.24	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA	
Arsenic	3.1		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA	
Barium	73		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.42		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA	
Boron	2.1	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA	
Calcium	7500	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA	
Chromium	11	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA	
Cobalt	4.4		0.28	0.062	mg/Kg	1	☼	6010B	Total/NA	
Copper	8.2		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA	
Iron	11000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA	
Lead	5.1		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA	
Magnesium	4500		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA	
Manganese	280	B	0.55	0.11	mg/Kg	1	☼	6010B	Total/NA	
Nickel	9.7		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA	
Potassium	680		28	4.5	mg/Kg	1	☼	6010B	Total/NA	
Selenium	0.49	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA	
Sodium	72		55	7.3	mg/Kg	1	☼	6010B	Total/NA	
Thallium	0.81		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA	
Vanadium	15		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA	
Zinc	33		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA	
Barium	0.81		0.50	0.050	mg/L	1		6010B	TCLP	
Boron	0.075	J B	0.50	0.050	mg/L	1		6010B	TCLP	
Manganese	0.81		0.025	0.010	mg/L	1		6010B	TCLP	
Zinc	0.022	J	0.50	0.020	mg/L	1		6010B	TCLP	
Manganese	0.37		0.025	0.010	mg/L	1		6010B	SPLP East	
Mercury	0.018		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA	
pH	7.6		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: 500-121504-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121504-11	1314V3-18-B06 (0-6)	Solid	12/14/16 11:55	12/15/16 10:00
500-121504-12	1314V3-18-B06 (6-12)	Solid	12/14/16 12:05	12/15/16 10:00
500-121504-13	1314V3-18-B06 (12-17)	Solid	12/14/16 12:10	12/15/16 10:00
500-121504-14	1314V3-18-B01 (0-6)	Solid	12/14/16 12:40	12/15/16 10:00
500-121504-15	1314V3-18-B01 (6-12)	Solid	12/14/16 12:50	12/15/16 10:00
500-121504-16	1314V3-18-B01 (12-18)	Solid	12/14/16 13:00	12/15/16 10:00
500-121504-17	1314V3-18-B05 (0-8)	Solid	12/14/16 13:35	12/15/16 10:00
500-121504-18	1314V3-18-B05 (8-12)	Solid	12/14/16 13:45	12/15/16 10:00
500-121504-19	1314V3-18-B03 (0-6)	Solid	12/14/16 14:25	12/15/16 10:00
500-121504-20	1314V3-18-B03 (6-12)	Solid	12/14/16 14:30	12/15/16 10:00



Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

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	0.0070	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Carbon tetrachloride	<0.0016 *		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 120	12/15/16 16:33	12/20/16 20:12	1
Dibromofluoromethane	120		75 - 120	12/15/16 16:33	12/20/16 20:12	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/15/16 16:33	12/20/16 20:12	1
Toluene-d8 (Surr)	118		75 - 123	12/15/16 16:33	12/20/16 20:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Naphthalene	0.13		0.036	0.0056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Methylnaphthalene	0.21		0.074	0.0067	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Acenaphthylene	0.19		0.036	0.0048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Acenaphthene	0.041		0.036	0.0066	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Dibenzofuran	0.17 J		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Fluorene	0.099		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Phenanthrene	1.6		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Anthracene	0.46		0.036	0.0061	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Carbazole	0.19		0.18	0.091	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Fluoranthene	1.9		0.036	0.0068	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Pyrene	1.6		0.036	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[a]anthracene	0.91		0.036	0.0049	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.82		0.036	0.010	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[b]fluoranthene	0.94		0.036	0.0079	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[k]fluoranthene	0.43		0.036	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[a]pyrene	0.72		0.036	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Indeno[1,2,3-cd]pyrene	0.24		0.036	0.0095	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Dibenz(a,h)anthracene	0.077		0.036	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
Benzo[g,h,i]perylene	0.25		0.036	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		40 - 130	12/23/16 07:12	12/27/16 22:16	1
Phenol-d5	105		36 - 123	12/23/16 07:12	12/27/16 22:16	1
Nitrobenzene-d5	98		33 - 124	12/23/16 07:12	12/27/16 22:16	1
2-Fluorobiphenyl	87		42 - 115	12/23/16 07:12	12/27/16 22:16	1
2,4,6-Tribromophenol	43		25 - 130	12/23/16 07:12	12/27/16 22:16	1
Terphenyl-d14	91		25 - 150	12/23/16 07:12	12/27/16 22:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	0.89	0.18	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Arsenic	5.6		0.44	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Barium	63		0.44	0.081	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Beryllium	0.55		0.18	0.038	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Boron	7.1		2.2	0.31	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Cadmium	0.42		0.089	0.026	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Calcium	28000	B	8.9	2.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Chromium	12	B	0.44	0.076	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Cobalt	4.7		0.22	0.050	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Copper	17		0.44	0.096	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Iron	13000	B	8.9	3.4	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Lead	23		0.22	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Magnesium	14000		4.4	1.8	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Manganese	280	B	0.44	0.088	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Nickel	12		0.44	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Potassium	850		22	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Selenium	0.45		0.44	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Silver	<0.22		0.22	0.052	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Sodium	560		44	5.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Thallium	1.0		0.44	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Vanadium	20		0.22	0.065	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1
Zinc	86		0.89	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 21:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:29	1
Boron	0.095	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:29	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (0-6)

Lab Sample ID: 500-121504-11

Date Collected: 12/14/16 11:55

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0042	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Manganese	1.4		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Nickel	0.010	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:29	1
Zinc	0.16	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.34		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 00:59	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	-	12/22/16 08:57	12/22/16 16:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:37	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	-	12/22/16 14:30	12/23/16 10:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.018	0.0097	mg/Kg	☼	12/20/16 13:30	12/21/16 11:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/22/16 16:42	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0063	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Carbon tetrachloride	<0.0015 *		0.0015	0.00042	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Vinyl chloride	<0.0015		0.0015	0.00064	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/15/16 16:33	12/20/16 20:38	1
Dibromofluoromethane	119		75 - 120	12/15/16 16:33	12/20/16 20:38	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/15/16 16:33	12/20/16 20:38	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/20/16 20:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

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	☼	12/23/16 07:12	12/27/16 22:44	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Naphthalene	0.17		0.037	0.0058	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Methylnaphthalene	0.23		0.076	0.0069	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Acenaphthylene	0.020 J		0.037	0.0050	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Acenaphthene	0.0072 J		0.037	0.0068	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Dibenzofuran	0.076 J		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Fluorene	0.0089 J		0.037	0.0053	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Phenanthrene	0.22		0.037	0.0052	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Anthracene	0.030 J		0.037	0.0063	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Fluoranthene	0.18		0.037	0.0070	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Pyrene	0.17		0.037	0.0075	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[a]anthracene	0.090		0.037	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.12		0.037	0.010	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[b]fluoranthene	0.14		0.037	0.0081	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[k]fluoranthene	0.057		0.037	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[a]pyrene	0.084		0.037	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Indeno[1,2,3-cd]pyrene	0.036 J		0.037	0.0098	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Dibenz(a,h)anthracene	0.012 J		0.037	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
Benzo[g,h,i]perylene	0.043		0.037	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:12	12/27/16 22:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/23/16 07:12	12/27/16 22:44	1
Phenol-d5	93		36 - 123	12/23/16 07:12	12/27/16 22:44	1
Nitrobenzene-d5	96		33 - 124	12/23/16 07:12	12/27/16 22:44	1
2-Fluorobiphenyl	85		42 - 115	12/23/16 07:12	12/27/16 22:44	1
2,4,6-Tribromophenol	55		25 - 130	12/23/16 07:12	12/27/16 22:44	1
Terphenyl-d14	88		25 - 150	12/23/16 07:12	12/27/16 22:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62 J		0.96	0.20	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Arsenic	7.3		0.48	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Barium	76		0.48	0.088	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Beryllium	0.68		0.19	0.042	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Boron	14		2.4	0.34	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Cadmium	0.32		0.096	0.028	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Calcium	14000 B		9.6	3.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Chromium	11 B		0.48	0.083	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Cobalt	5.6		0.24	0.054	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Copper	19		0.48	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Iron	20000 B		9.6	3.7	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Lead	39		0.24	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Magnesium	4300		4.8	2.0	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Manganese	220 B		0.48	0.095	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Nickel	13		0.48	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Potassium	790		24	3.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Selenium	0.93		0.48	0.24	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Silver	<0.24		0.24	0.056	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Sodium	270		48	6.4	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Thallium	1.0		0.48	0.24	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Vanadium	19		0.24	0.070	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1
Zinc	120		0.96	0.31	mg/Kg	☼	12/22/16 08:28	12/23/16 21:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.83		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:36	1
Boron	0.13 J B		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:36	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (6-12)

Lab Sample ID: 500-121504-12

Date Collected: 12/14/16 12:05

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0079		0.0050	0.0020	mg/L	-	12/22/16 08:57	12/23/16 12:49	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Cobalt	0.048		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Iron	0.84		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Lead	0.015		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Manganese	9.1		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Nickel	0.047		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:36	1
Zinc	0.35	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:36	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	12/23/16 07:45	12/28/16 01:06	1
Lead	0.030		0.0075	0.0075	mg/L	-	12/23/16 07:45	12/28/16 01:06	1
Manganese	0.14		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 01:06	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	-	12/22/16 08:57	12/22/16 16:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:41	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	-	12/22/16 14:30	12/23/16 10:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.019	0.0099	mg/Kg	☼	12/20/16 13:30	12/21/16 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		12/22/16 16:49	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.021		0.017	0.0076	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Carbon tetrachloride	<0.0017 *		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/15/16 16:33	12/20/16 21:04	1
Dibromofluoromethane	116		75 - 120	12/15/16 16:33	12/20/16 21:04	1
1,2-Dichloroethane-d4 (Surr)	117		69 - 134	12/15/16 16:33	12/20/16 21:04	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/20/16 21:04	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	☼	12/23/16 07:12	12/27/16 23:11	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Methylnaphthalene	0.0091	J	0.080	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Phenanthrene	0.0072	J	0.039	0.0055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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	☼	12/23/16 07:12	12/27/16 23:11	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:12	12/27/16 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	105		40 - 130	12/23/16 07:12	12/27/16 23:11	1
Phenol-d5	77		36 - 123	12/23/16 07:12	12/27/16 23:11	1
Nitrobenzene-d5	93		33 - 124	12/23/16 07:12	12/27/16 23:11	1
2-Fluorobiphenyl	88		42 - 115	12/23/16 07:12	12/27/16 23:11	1
2,4,6-Tribromophenol	47		25 - 130	12/23/16 07:12	12/27/16 23:11	1
Terphenyl-d14	93		25 - 150	12/23/16 07:12	12/27/16 23:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	0.92	0.19	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Arsenic	2.5		0.46	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Barium	49		0.46	0.085	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Beryllium	0.41		0.18	0.040	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Boron	2.0	J	2.3	0.32	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Cadmium	<0.092		0.092	0.027	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Calcium	3300	B	9.2	3.0	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Chromium	10	B	0.46	0.079	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Cobalt	4.5		0.23	0.052	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Copper	8.1		0.46	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Iron	10000	B	9.2	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Lead	6.6		0.23	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Magnesium	1800		4.6	1.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Manganese	210	B	0.46	0.091	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Nickel	9.3		0.46	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Potassium	580		23	3.8	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Selenium	0.37	J	0.46	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Silver	<0.23		0.23	0.054	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Sodium	110		46	6.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Thallium	0.70		0.46	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Vanadium	16		0.23	0.067	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1
Zinc	24		0.92	0.29	mg/Kg	☼	12/22/16 08:28	12/23/16 21:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.3		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:42	1
Boron	0.13	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B06 (12-17)

Lab Sample ID: 500-121504-13

Date Collected: 12/14/16 12:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0023	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Cobalt	0.032		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Manganese	14		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Nickel	0.041		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:42	1
Zinc	0.062	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 01:13	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	-	12/22/16 08:57	12/22/16 16:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:44	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	-	12/22/16 14:30	12/23/16 10:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.019	0.0099	mg/Kg	☼	12/20/16 13:30	12/21/16 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		12/22/16 16:53	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Carbon tetrachloride	<0.0016 *		0.0016	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/15/16 16:33	12/20/16 21:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/15/16 16:33	12/20/16 21:30	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/20/16 21:30	1
1,2-Dichloroethane-d4 (Surr)	130		69 - 134	12/15/16 16:33	12/20/16 21:30	1
Toluene-d8 (Surr)	109		75 - 123	12/15/16 16:33	12/20/16 21:30	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	☼	12/23/16 07:12	12/27/16 23:38	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

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	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Naphthalene	0.039		0.036	0.0056	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Methylnaphthalene	0.059 J		0.073	0.0067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Acenaphthylene	0.012 J		0.036	0.0048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Phenanthrene	0.089		0.036	0.0051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Anthracene	0.019 J		0.036	0.0061	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Fluoranthene	0.088		0.036	0.0067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Pyrene	0.086		0.036	0.0072	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[a]anthracene	0.047		0.036	0.0049	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.056		0.036	0.0099	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[b]fluoranthene	0.085		0.036	0.0079	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[k]fluoranthene	0.030 J		0.036	0.011	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[a]pyrene	0.052		0.036	0.0070	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Indeno[1,2,3-cd]pyrene	0.021 J		0.036	0.0094	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
Benzo[g,h,i]perylene	0.025 J		0.036	0.012	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/27/16 23:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		40 - 130	12/23/16 07:12	12/27/16 23:38	1
Phenol-d5	99		36 - 123	12/23/16 07:12	12/27/16 23:38	1
Nitrobenzene-d5	103		33 - 124	12/23/16 07:12	12/27/16 23:38	1
2-Fluorobiphenyl	92		42 - 115	12/23/16 07:12	12/27/16 23:38	1
2,4,6-Tribromophenol	53		25 - 130	12/23/16 07:12	12/27/16 23:38	1
Terphenyl-d14	92		25 - 150	12/23/16 07:12	12/27/16 23:38	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33 J		1.0	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Arsenic	4.5		0.51	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Barium	52		0.51	0.093	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Beryllium	0.50		0.20	0.044	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Boron	4.6		2.5	0.35	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Cadmium	0.20		0.10	0.029	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Calcium	80000 B		100	33	mg/Kg	☼	12/22/16 08:28	12/27/16 20:42	10
Chromium	11 B		0.51	0.087	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Cobalt	5.4		0.25	0.057	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Copper	15		0.51	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Iron	13000 B		10	3.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Lead	19		0.25	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Magnesium	19000		5.1	2.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Manganese	370 B		0.51	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Nickel	13		0.51	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Potassium	930		25	4.1	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Selenium	0.34 J		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Sodium	340		51	6.7	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Thallium	0.89		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Vanadium	19		0.25	0.074	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	1
Zinc	51		1.0	0.32	mg/Kg	☼	12/22/16 08:28	12/23/16 21:44	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		12/22/16 08:57	12/22/16 19:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:49	1
Boron	0.074 J B		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (0-6)

Lab Sample ID: 500-121504-14

Date Collected: 12/14/16 12:40

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0030	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Manganese	1.5		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Nickel	0.013	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:49	1
Zinc	0.076	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:49	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	-	12/23/16 07:45	12/28/16 01:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 08:57	12/22/16 16:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:48	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	-	12/22/16 14:30	12/23/16 10:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.017	0.0091	mg/Kg	☼	12/20/16 13:30	12/21/16 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU	-		12/22/16 16:57	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Carbon tetrachloride	<0.0016 *		0.0016	0.00046	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 21:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/15/16 16:33	12/20/16 21:56	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/20/16 21:56	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/15/16 16:33	12/20/16 21:56	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/20/16 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Naphthalene	0.011	J	0.037	0.0057	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Methylnaphthalene	0.019	J	0.074	0.0068	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Acenaphthylene	0.0090	J	0.037	0.0049	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Hexachlorobenzene	<0.074		0.074	0.0086	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Phenanthrene	0.069		0.037	0.0051	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Anthracene	0.016	J	0.037	0.0062	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Fluoranthene	0.068		0.037	0.0068	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Pyrene	0.074		0.037	0.0073	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[a]anthracene	0.037		0.037	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.048		0.037	0.010	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[b]fluoranthene	0.061		0.037	0.0080	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[k]fluoranthene	0.019 J		0.037	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[a]pyrene	0.034 J		0.037	0.0071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Indeno[1,2,3-cd]pyrene	0.015 J		0.037	0.0096	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
Benzo[g,h,i]perylene	0.018 J		0.037	0.012	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/23/16 07:12	12/28/16 00:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	116		40 - 130	12/23/16 07:12	12/28/16 00:06	1
Phenol-d5	102		36 - 123	12/23/16 07:12	12/28/16 00:06	1
Nitrobenzene-d5	102		33 - 124	12/23/16 07:12	12/28/16 00:06	1
2-Fluorobiphenyl	90		42 - 115	12/23/16 07:12	12/28/16 00:06	1
2,4,6-Tribromophenol	46		25 - 130	12/23/16 07:12	12/28/16 00:06	1
Terphenyl-d14	92		25 - 150	12/23/16 07:12	12/28/16 00:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39 J		1.1	0.24	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Arsenic	6.2		0.57	0.26	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Barium	52		0.57	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Beryllium	0.46		0.23	0.049	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Boron	6.2		2.8	0.40	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Cadmium	0.20		0.11	0.033	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Calcium	54000 B		11	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Chromium	10 B		0.57	0.097	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Cobalt	4.6		0.28	0.064	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Copper	15		0.57	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Iron	13000 B		11	4.4	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Lead	17		0.28	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Magnesium	18000		5.7	2.3	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Manganese	320 B		0.57	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Nickel	11		0.57	0.15	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Potassium	760		28	4.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Selenium	0.37 J		0.57	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Sodium	710		57	7.5	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Thallium	0.76		0.57	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Vanadium	18		0.28	0.083	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	1
Zinc	78		1.1	0.36	mg/Kg	☼	12/22/16 08:28	12/23/16 21:51	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		12/22/16 08:57	12/22/16 19:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 19:56	1
Boron	0.098 J B		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 19:56	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (6-12)

Lab Sample ID: 500-121504-15

Date Collected: 12/14/16 12:50

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0047	J ^	0.0050	0.0020	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Cobalt	0.032		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Manganese	6.3		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Nickel	0.041		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 19:56	1
Zinc	0.096	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 19:56	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	-	12/23/16 07:45	12/28/16 01:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 08:57	12/22/16 16:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:51	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	-	12/22/16 14:30	12/23/16 10:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.010	mg/Kg	☼	12/20/16 13:30	12/21/16 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU	-		12/22/16 17:01	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/15/16 16:33	12/21/16 17:28	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/21/16 17:28	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/15/16 16:33	12/21/16 17:28	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/21/16 17:28	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	☼	12/23/16 07:12	12/28/16 00:33	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Naphthalene	0.0068	J	0.036	0.0055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Methylnaphthalene	0.0081	J	0.072	0.0066	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Fluorene	0.0060	J	0.036	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Pentachlorophenol	<0.72		0.72	0.58	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Phenanthrene	0.055		0.036	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Anthracene	0.012	J	0.036	0.0060	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Fluoranthene	0.064		0.036	0.0067	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Pyrene	0.068		0.036	0.0071	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[a]anthracene	0.025	J	0.036	0.0048	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.032	J	0.036	0.0098	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[b]fluoranthene	0.037		0.036	0.0078	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[a]pyrene	0.026	J	0.036	0.0070	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Indeno[1,2,3-cd]pyrene	0.010	J	0.036	0.0093	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
Benzo[g,h,i]perylene	0.012	J	0.036	0.012	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 07:12	12/28/16 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	115		40 - 130	12/23/16 07:12	12/28/16 00:33	1
Phenol-d5	105		36 - 123	12/23/16 07:12	12/28/16 00:33	1
Nitrobenzene-d5	103		33 - 124	12/23/16 07:12	12/28/16 00:33	1
2-Fluorobiphenyl	94		42 - 115	12/23/16 07:12	12/28/16 00:33	1
2,4,6-Tribromophenol	50		25 - 130	12/23/16 07:12	12/28/16 00:33	1
Terphenyl-d14	94		25 - 150	12/23/16 07:12	12/28/16 00:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	0.95	0.20	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Arsenic	6.0		0.47	0.22	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Barium	39		0.47	0.087	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Beryllium	0.39		0.19	0.041	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Boron	2.8		2.4	0.33	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Cadmium	0.13		0.095	0.027	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Calcium	35000	B	9.5	3.0	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Chromium	9.7	B	0.47	0.081	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Cobalt	5.7		0.24	0.053	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Copper	11		0.47	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Iron	13000	B	9.5	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Lead	9.5		0.24	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Magnesium	18000		4.7	1.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Manganese	290	B	0.47	0.094	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Nickel	13		0.47	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Potassium	760		24	3.9	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Selenium	0.62		0.47	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Silver	<0.24		0.24	0.055	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Sodium	460		47	6.2	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Thallium	0.86		0.47	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Vanadium	16		0.24	0.069	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	1
Zinc	33		0.95	0.30	mg/Kg	☼	12/22/16 08:28	12/23/16 21:57	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		12/22/16 08:57	12/22/16 20:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 20:03	1
Boron	0.063	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:03	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B01 (12-18)

Lab Sample ID: 500-121504-16

Date Collected: 12/14/16 13:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 89.7

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	-	12/22/16 08:57	12/22/16 20:03	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Cobalt	0.024	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Manganese	7.8		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Nickel	0.032		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:03	1
Zinc	0.021	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.23		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 01:33	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	-	12/22/16 08:57	12/22/16 16:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 16:54	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	-	12/22/16 14:30	12/23/16 10:40	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	☼	12/20/16 13:30	12/21/16 11:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		12/22/16 17:04	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (0-8)

Lab Sample ID: 500-121504-17

Date Collected: 12/14/16 13:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 91.7

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	☼	12/15/16 16:33	12/21/16 17:54	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/15/16 16:33	12/21/16 17:54	1
Dibromofluoromethane	118		75 - 120	12/15/16 16:33	12/21/16 17:54	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/15/16 16:33	12/21/16 17:54	1
Toluene-d8 (Surr)	108		75 - 123	12/15/16 16:33	12/21/16 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.077	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.052	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
1,3-Dichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (0-8)

Lab Sample ID: 500-121504-17

Date Collected: 12/14/16 13:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2-Chlorophenol	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,4,5-Trichlorophenol	<0.35		0.35	0.079	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2-Chloronaphthalene	<0.18		0.18	0.038	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,6-Dinitrotoluene	<0.18		0.18	0.068	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2-Nitrophenol	<0.35		0.35	0.082	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
2,4-Dinitrotoluene	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Phenanthrene	0.026	J	0.035	0.0049	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Anthracene	0.0084	J	0.035	0.0058	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Carbazole	<0.18		0.18	0.087	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Fluoranthene	0.059		0.035	0.0065	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Pyrene	0.063		0.035	0.0069	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Butyl benzyl phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Benzo[a]anthracene	0.059		0.035	0.0047	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (0-8)

Lab Sample ID: 500-121504-17

Date Collected: 12/14/16 13:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.068		0.035	0.0095	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Benzo[b]fluoranthene	0.16		0.035	0.0075	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Benzo[k]fluoranthene	0.087		0.035	0.010	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Benzo[a]pyrene	0.086		0.035	0.0067	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Indeno[1,2,3-cd]pyrene	0.059		0.035	0.0090	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Dibenz(a,h)anthracene	0.015 J		0.035	0.0067	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
Benzo[g,h,i]perylene	0.065		0.035	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1
3 & 4 Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 01:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	110		40 - 130	12/23/16 07:12	12/28/16 01:00	1
Phenol-d5	98		36 - 123	12/23/16 07:12	12/28/16 01:00	1
Nitrobenzene-d5	97		33 - 124	12/23/16 07:12	12/28/16 01:00	1
2-Fluorobiphenyl	89		42 - 115	12/23/16 07:12	12/28/16 01:00	1
2,4,6-Tribromophenol	55		25 - 130	12/23/16 07:12	12/28/16 01:00	1
Terphenyl-d14	92		25 - 150	12/23/16 07:12	12/28/16 01:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48 J		1.0	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Arsenic	3.2		0.51	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Barium	53		0.51	0.093	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Beryllium	0.52		0.20	0.044	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Boron	2.4 J		2.5	0.35	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Cadmium	<0.10		0.10	0.029	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Calcium	5000 B		10	3.3	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Chromium	13 B		0.51	0.087	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Cobalt	5.3		0.25	0.057	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Copper	13		0.51	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Iron	12000 B		10	3.9	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Lead	18		0.25	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Magnesium	2600		5.1	2.1	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Manganese	270 B		0.51	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Nickel	13		0.51	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Potassium	570		25	4.1	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Selenium	0.52		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Sodium	89		51	6.7	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Thallium	0.99		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Vanadium	21		0.25	0.074	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	1
Zinc	38		1.0	0.32	mg/Kg	☼	12/22/16 08:28	12/23/16 22:04	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		12/22/16 08:57	12/22/16 20:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 20:09	1
Boron	0.070 J B		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:09	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (0-8)

Lab Sample ID: 500-121504-17

Date Collected: 12/14/16 13:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050	^	0.0050	0.0020	mg/L		12/22/16 08:57	12/22/16 20:09	1
Chromium	<0.025		0.025	0.010	mg/L		12/22/16 08:57	12/22/16 20:09	1
Cobalt	<0.025		0.025	0.010	mg/L		12/22/16 08:57	12/22/16 20:09	1
Iron	<0.40		0.40	0.20	mg/L		12/22/16 08:57	12/22/16 20:09	1
Lead	0.0079		0.0075	0.0075	mg/L		12/22/16 08:57	12/22/16 20:09	1
Manganese	0.44		0.025	0.010	mg/L		12/22/16 08:57	12/22/16 20:09	1
Nickel	<0.025		0.025	0.010	mg/L		12/22/16 08:57	12/22/16 20:09	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/16 08:57	12/22/16 20:09	1
Silver	<0.025		0.025	0.010	mg/L		12/22/16 08:57	12/22/16 20:09	1
Zinc	0.12	J	0.50	0.020	mg/L		12/22/16 08:57	12/22/16 20:09	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.042		0.0075	0.0075	mg/L		12/23/16 07:45	12/28/16 01:56	1
Manganese	0.50		0.025	0.010	mg/L		12/23/16 07:45	12/28/16 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		12/22/16 08:57	12/22/16 16:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/16 08:57	12/22/16 16:58	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		12/22/16 14:30	12/23/16 10:42	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	☼	12/20/16 13:30	12/21/16 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/22/16 17:08	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (8-12)

Lab Sample ID: 500-121504-18

Date Collected: 12/14/16 13:45

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Carbon tetrachloride	<0.0018 *		0.0018	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/15/16 16:33	12/20/16 23:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/15/16 16:33	12/20/16 23:14	1
Dibromofluoromethane	120		75 - 120	12/15/16 16:33	12/20/16 23:14	1
1,2-Dichloroethane-d4 (Surr)	123		69 - 134	12/15/16 16:33	12/20/16 23:14	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/20/16 23:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.078	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.052	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
1,3-Dichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (8-12)

Lab Sample ID: 500-121504-18

Date Collected: 12/14/16 13:45

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
4-Chloroaniline	<0.71		0.71	0.16	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2-Methylnaphthalene	<0.071		0.071	0.0064	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Anthracene	<0.035		0.035	0.0058	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Carbazole	<0.18		0.18	0.087	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Fluoranthene	<0.035		0.035	0.0065	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Pyrene	<0.035		0.035	0.0069	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (8-12)

Lab Sample ID: 500-121504-18

Date Collected: 12/14/16 13:45

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.035		0.035	0.0095	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Benzo[b]fluoranthene	<0.035		0.035	0.0075	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Benzo[a]pyrene	<0.035		0.035	0.0068	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0091	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1
3 & 4 Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		40 - 130	12/23/16 07:12	12/28/16 01:28	1
Phenol-d5	83		36 - 123	12/23/16 07:12	12/28/16 01:28	1
Nitrobenzene-d5	91		33 - 124	12/23/16 07:12	12/28/16 01:28	1
2-Fluorobiphenyl	82		42 - 115	12/23/16 07:12	12/28/16 01:28	1
2,4,6-Tribromophenol	46		25 - 130	12/23/16 07:12	12/28/16 01:28	1
Terphenyl-d14	83		25 - 150	12/23/16 07:12	12/28/16 01:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41	J	1.0	0.21	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Arsenic	4.8		0.51	0.24	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Barium	29		0.51	0.094	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Beryllium	0.42		0.21	0.044	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Boron	1.1	J	2.6	0.36	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Cadmium	<0.10		0.10	0.030	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Calcium	13000	B	10	3.3	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Chromium	8.6	B	0.51	0.088	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Cobalt	5.4		0.26	0.058	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Copper	11		0.51	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Iron	12000	B	10	4.0	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Lead	2.8		0.26	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Magnesium	6900		5.1	2.1	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Manganese	300	B	0.51	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Nickel	15		0.51	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Potassium	320		26	4.2	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Selenium	0.55		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Sodium	140		51	6.8	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Thallium	0.90		0.51	0.25	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Vanadium	25		0.26	0.075	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1
Zinc	24		1.0	0.32	mg/Kg	☼	12/22/16 08:28	12/23/16 22:11	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.38	J	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 20:16	1
Boron	0.073	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:16	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B05 (8-12)

Lab Sample ID: 500-121504-18

Date Collected: 12/14/16 13:45

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 90.8

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	-	12/22/16 08:57	12/22/16 20:16	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Cobalt	0.013	J	0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Manganese	2.8		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Nickel	0.031		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:16	1
Zinc	0.038	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:16	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	-	12/23/16 07:45	12/28/16 02:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 08:57	12/22/16 17:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 17:01	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	-	12/22/16 14:30	12/23/16 10:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.016		0.016	0.0084	mg/Kg	☼	12/20/16 13:30	12/21/16 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		12/22/16 17:12	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (0-6)

Lab Sample ID: 500-121504-19

Date Collected: 12/14/16 14:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.6

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	☼	12/15/16 16:33	12/21/16 18:20	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 18:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/15/16 16:33	12/21/16 18:20	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/21/16 18:20	1
1,2-Dichloroethane-d4 (Surr)	120		69 - 134	12/15/16 16:33	12/21/16 18:20	1
Toluene-d8 (Surr)	108		75 - 123	12/15/16 16:33	12/21/16 18:20	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	☼	12/23/16 07:12	12/28/16 01:55	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (0-6)

Lab Sample ID: 500-121504-19

Date Collected: 12/14/16 14:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.6

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	☼	12/23/16 07:12	12/28/16 01:55	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Phenanthrene	0.014	J	0.038	0.0053	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Fluoranthene	0.022	J	0.038	0.0071	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Pyrene	0.021	J	0.038	0.0076	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Benzo[a]anthracene	0.0079	J	0.038	0.0051	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (0-6)

Lab Sample ID: 500-121504-19

Date Collected: 12/14/16 14:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.6

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	☼	12/23/16 07:12	12/28/16 01:55	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Benzo[b]fluoranthene	0.025	J	0.038	0.0082	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Benzo[a]pyrene	0.011	J	0.038	0.0074	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:12	12/28/16 01:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		40 - 130	12/23/16 07:12	12/28/16 01:55	1
Phenol-d5	100		36 - 123	12/23/16 07:12	12/28/16 01:55	1
Nitrobenzene-d5	105		33 - 124	12/23/16 07:12	12/28/16 01:55	1
2-Fluorobiphenyl	91		42 - 115	12/23/16 07:12	12/28/16 01:55	1
2,4,6-Tribromophenol	53		25 - 130	12/23/16 07:12	12/28/16 01:55	1
Terphenyl-d14	92		25 - 150	12/23/16 07:12	12/28/16 01:55	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	☼	12/22/16 08:28	12/23/16 22:18	1
Arsenic	4.1		0.58	0.27	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Barium	60		0.58	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Beryllium	0.50		0.23	0.050	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Boron	4.5		2.9	0.40	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Cadmium	0.083	J	0.12	0.034	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Calcium	38000	B	12	3.7	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Chromium	12	B	0.58	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Cobalt	5.5		0.29	0.065	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Copper	13		0.58	0.13	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Iron	13000	B	12	4.5	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Lead	10		0.29	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Magnesium	19000		5.8	2.4	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Manganese	360	B	0.58	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Nickel	15		0.58	0.16	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Potassium	980		29	4.7	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Selenium	<0.58		0.58	0.29	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Sodium	89		58	7.6	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Thallium	0.88		0.58	0.28	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Vanadium	18		0.29	0.085	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1
Zinc	38		1.2	0.37	mg/Kg	☼	12/22/16 08:28	12/23/16 22:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.86		0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 20:39	1
Boron	0.12	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:39	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (0-6)

Lab Sample ID: 500-121504-19

Date Collected: 12/14/16 14:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.6

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	-	12/22/16 08:57	12/22/16 20:39	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Manganese	0.36		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:39	1
Zinc	0.035	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.22		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 02:09	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	-	12/22/16 08:57	12/22/16 17:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 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	-	12/22/16 14:30	12/23/16 10:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083		0.017	0.0090	mg/Kg	☼	12/20/16 13:30	12/21/16 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU	-		12/22/16 17:16	1

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (6-12)

Lab Sample ID: 500-121504-20

Date Collected: 12/14/16 14:30

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.8

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	☼	12/15/16 16:33	12/21/16 18:46	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/15/16 16:33	12/21/16 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 120	12/15/16 16:33	12/21/16 18:46	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/21/16 18:46	1
1,2-Dichloroethane-d4 (Surr)	120		69 - 134	12/15/16 16:33	12/21/16 18:46	1
Toluene-d8 (Surr)	108		75 - 123	12/15/16 16:33	12/21/16 18:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (6-12)

Lab Sample ID: 500-121504-20

Date Collected: 12/14/16 14:30

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.8

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	☼	12/23/16 07:12	12/28/16 02:22	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Pyrene	0.030	J	0.037	0.0074	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (6-12)

Lab Sample ID: 500-121504-20

Date Collected: 12/14/16 14:30

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.8

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	☼	12/23/16 07:12	12/28/16 02:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Benzo[b]fluoranthene	0.016	J	0.037	0.0080	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/23/16 07:12	12/28/16 02:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		40 - 130	12/23/16 07:12	12/28/16 02:22	1
Phenol-d5	81		36 - 123	12/23/16 07:12	12/28/16 02:22	1
Nitrobenzene-d5	89		33 - 124	12/23/16 07:12	12/28/16 02:22	1
2-Fluorobiphenyl	82		42 - 115	12/23/16 07:12	12/28/16 02:22	1
2,4,6-Tribromophenol	44		25 - 130	12/23/16 07:12	12/28/16 02:22	1
Terphenyl-d14	86		25 - 150	12/23/16 07:12	12/28/16 02:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.24	J	1.1	0.23	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Arsenic	3.1		0.55	0.26	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Barium	73		0.55	0.10	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Beryllium	0.42		0.22	0.048	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Boron	2.1	J	2.8	0.39	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Cadmium	<0.11		0.11	0.032	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Calcium	7500	B	11	3.6	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Chromium	11	B	0.55	0.095	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Cobalt	4.4		0.28	0.062	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Copper	8.2		0.55	0.12	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Iron	11000	B	11	4.3	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Lead	5.1		0.28	0.14	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Magnesium	4500		5.5	2.2	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Manganese	280	B	0.55	0.11	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Nickel	9.7		0.55	0.15	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Potassium	680		28	4.5	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Selenium	0.49	J	0.55	0.27	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Sodium	72		55	7.3	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Thallium	0.81		0.55	0.27	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Vanadium	15		0.28	0.081	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	1
Zinc	33		1.1	0.35	mg/Kg	☼	12/22/16 08:28	12/23/16 22:24	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		12/22/16 08:57	12/22/16 20:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 08:57	12/22/16 20:46	1
Boron	0.075	J B	0.50	0.050	mg/L		12/22/16 08:57	12/22/16 20:46	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121504-3

Client Sample ID: 1314V3-18-B03 (6-12)

Lab Sample ID: 500-121504-20

Date Collected: 12/14/16 14:30

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 84.8

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	-	12/22/16 08:57	12/22/16 20:46	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Manganese	0.81		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 08:57	12/22/16 20:46	1
Zinc	0.022	J	0.50	0.020	mg/L	-	12/22/16 08:57	12/22/16 20:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.37		0.025	0.010	mg/L	-	12/23/16 07:45	12/28/16 02:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 08:57	12/22/16 17:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 08:57	12/22/16 17:15	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	-	12/22/16 14:30	12/23/16 10:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.017	0.0090	mg/Kg	☼	12/20/16 13:30	12/21/16 11:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU	-		12/22/16 17:20	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121504-3

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
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.
^	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: 500-121504-3

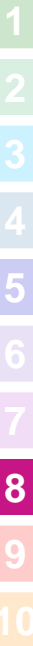
Laboratory: TestAmerica Chicago

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)	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 #: 500-121504
Chain of Custody Number: EB46-39
Page _____ of _____
Temperature °C of Cooler: _____

Client <u>EE</u>		Client Project # <u>1009008-0046-01</u>		Preservative		Parameter					Comments								
Project Name <u>I 74</u>		Lab Project # <u>40012744</u>																	
Project Location/State <u>Rock Island County, IL</u>		Lab Project # <u>40012744</u>																	
Sampler <u>S-Couper</u>		Lab P/M <u>D. Wright</u>																	
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Vol	S Vol	Total TAC	inertis	TCU/SP/TA TAC W/TA	PT/4% Solid							
			Date	Time															
11		1314V3-18-B06 (0-6)	12-14-16	1155	2	S	X	X	X	X	X								
12		1314V3-18-B06 (6-12)	12-14-16	1205	2	S	X	X	X	X	X								
13		1314V3-18-B06 (12-17)	12-14-16	1210	2	S	X	X	X	X	X								
14		1314V3-18-B01 (0-6)	12-14-16	1240	2	S	X	X	X	X	X								
15		1314V3-18-B01 (6-12)	12-14-16	1250	2	S	X	X	X	X	X								
16		1314V3-18-B01 (12-18)	12-14-16	1300	2	S	X	X	X	X	X								
17		1314V3-18-B05 (0-8)	12-14-16	1335	2	S	X	X	X	X	X								
18		1314V3-18-B05 (8-12)	12-14-16	1345	2	S	X	X	X	X	X								
19		1314V3-18-B03 (0-6)	12-14-16	1425	2	S	X	X	X	X	X								
20		1314V3-18-B03 (6-12)	12-14-16	1430	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: <u>EE</u> Date: <u>12-14-16</u> Time: <u>1730</u>	Received By: <u>[Signature]</u> Company: <u>TA-CPT</u> Date: <u>12/15/16</u> Time: <u>1000</u>
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____

Lab Courier: _____
Shipped: Fed-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: 500-121504-3

Login Number: 121504

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	5.0,3.1
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: 500-121505-1
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:
12/28/2016 4:56:24 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.

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Case Narrative

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

TestAmerica Job ID: 500-121505-1

Job ID: 500-121505-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121505-1

Comments

No additional comments.

Receipt

The samples were received on 12/15/2016 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

GC/MS VOA

Method(s) 8260B: One surrogate recovery for the following sample was outside the upper control limit: 1314V3-18-B09 (0-8) (500-121505-7). The sample was re-analyzed with similar results. The best analysis has been reported. This sample did not contain any target analytes.

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

GC/MS Semi VOA

Method(s) 8270D: The following samples contained one base/neutral surrogate outside acceptance limits: (500-121505-E-1-N MS) and (500-121505-E-1-O MSD). 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 matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121505-E-1-N MS) and (500-121505-E-1-O MSD)

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: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)

Lab Sample ID: 500-121505-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.012	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0096	J F1	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0059	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.011	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.58	J F1	0.95	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.0		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	78		0.47	0.087	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5		2.4	0.33	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000		9.5	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.47	0.081	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		9.5	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	9.1		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8100		4.7	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.47	0.094	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	780	F1	24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.46	J F1	0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	100		47	6.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.98		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.24	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		0.95	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.68		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.054	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.66		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.035	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B02 (0-7)D

Lab Sample ID: 500-121505-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0078	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	J	0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.017	J	0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0093	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.012	J	0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.016	J	0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.011	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.6		0.52	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	71		0.52	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.21	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6		2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.52	0.089	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: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)D (Continued)

Lab Sample ID: 500-121505-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	6.5		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8600		5.2	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.52	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.52	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	810		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.50	J	0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	110		52	6.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.92		0.52	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.0	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.062	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.55		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.15		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.017	0.0092	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B02 (7-13)

Lab Sample ID: 500-121505-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0063	J	0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0087	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.026	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0067	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.15		0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.15		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.092		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.089		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.12		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.061		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.094		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.047		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.013	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.053		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.47	J	0.99	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.8		0.49	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.49	0.091	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.63		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	4.8		2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.076	J	0.099	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	4500		9.9	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.49	0.085	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.6		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.49	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		9.9	3.8	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.25	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: 500-121505-1

Client Sample ID: 1314V3-18-B02 (7-13) (Continued)

Lab Sample ID: 500-121505-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1700		4.9	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.49	0.098	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.49	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	900		25	4.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57		0.49	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	94		49	6.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.49	0.24	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.25	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		0.99	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.26		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.074		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.050		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B07 (0-8)

Lab Sample ID: 500-121505-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.0070	J	0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.031	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.035	J	0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.035	J	0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.018	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.026	J	0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.020	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.27	J	0.97	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.5		0.49	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.49	0.089	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.19	0.042	mg/Kg	1	☼	6010B	Total/NA
Boron	6.4		2.4	0.34	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000		97	31	mg/Kg	10	☼	6010B	Total/NA
Chromium	13	B	0.49	0.084	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.4		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.49	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		9.7	3.8	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	30000		4.9	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.49	0.096	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.49	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	1000		24	4.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	480		49	6.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.95		0.49	0.24	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.24	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	24		0.97	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	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: 500-121505-1

Client Sample ID: 1314V3-18-B07 (0-8) (Continued)

Lab Sample ID: 500-121505-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.041	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.016	J	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: 1314V3-18-B04 (0-5.3)

Lab Sample ID: 500-121505-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.045		0.018	0.0080	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0084		0.0046	0.0020	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.036	J	0.038	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.060	J	0.076	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0068	J	0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0086	J	0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0070	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.022	J	0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.20		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.18		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.090		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.11		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.15		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.051		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.094		0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.038		0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.013	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.045		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.60	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.3		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	4.0		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	18000		11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.8		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5200		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	550		27	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.53		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.71		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		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: 500-121505-1

Client Sample ID: 1314V3-18-B04 (0-5.3) (Continued)

Lab Sample ID: 500-121505-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.067	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0033	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	2.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.10	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.42		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.058		0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-18-B08 (0-4.4)

Lab Sample ID: 500-121505-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.051		0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.011		0.0043	0.0019	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.033	J	0.036	0.0055	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.066	J	0.072	0.0066	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0071	J	0.036	0.0047	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.012	J	0.036	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.22		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.041		0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.30		0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.25		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.13		0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.15		0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.22		0.036	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.072		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.036	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.051		0.036	0.0093	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.015	J	0.036	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.054		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
3 & 4 Methylphenol	0.29		0.18	0.060	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.44	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.3		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.77		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11		0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	6700		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.3	B	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.3		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	7.8		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	9.2		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1000		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	110		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	6.6		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	410		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.58		0.51	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: 500-121505-1

Client Sample ID: 1314V3-18-B08 (0-4.4) (Continued)

Lab Sample ID: 500-121505-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	340		51	6.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.30	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.7		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	71		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0048	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.012		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	4.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.34	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.092		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.65		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.033		0.018	0.0092	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		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: 500-121505-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121505-1	1314V3-18-B02 (0-7)	Solid	12/14/16 15:00	12/15/16 10:00
500-121505-2	1314V3-18-B02 (0-7)D	Solid	12/14/16 15:00	12/15/16 10:00
500-121505-3	1314V3-18-B02 (7-13)	Solid	12/14/16 15:10	12/15/16 10:00
500-121505-4	1314V3-18-B07 (0-8)	Solid	12/14/16 15:35	12/15/16 10:00
500-121505-5	1314V3-18-B04 (0-5.3)	Solid	12/14/16 16:10	12/15/16 10:00
500-121505-6	1314V3-18-B08 (0-4.4)	Solid	12/14/16 16:25	12/15/16 10:00

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Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)

Lab Sample ID: 500-121505-1

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/15/16 16:33	12/19/16 19:05	1
Dibromofluoromethane	117		75 - 120	12/15/16 16:33	12/19/16 19:05	1
1,2-Dichloroethane-d4 (Surr)	125		69 - 134	12/15/16 16:33	12/19/16 19:05	1
Toluene-d8 (Surr)	105		75 - 123	12/15/16 16:33	12/19/16 19:05	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	☼	12/23/16 17:58	12/27/16 11:04	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)

Lab Sample ID: 500-121505-1

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Hexachloroethane	<0.19	F1	0.19	0.057	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Hexachlorocyclopentadiene	<0.76	F1	0.76	0.22	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,6-Dinitrotoluene	<0.19	F1	0.19	0.074	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2-Nitrophenol	<0.38	F1	0.38	0.089	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,4-Dinitrophenol	<0.76	F1	0.76	0.67	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
2,4-Dinitrotoluene	<0.19	F1	0.19	0.060	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Pentachlorophenol	<0.76	F2	0.76	0.61	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
4,6-Dinitro-2-methylphenol	<0.76	F1	0.76	0.30	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Fluoranthene	0.012	J	0.038	0.0070	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Pyrene	0.0096	J F1	0.038	0.0075	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Benzo[a]anthracene	0.0059	J	0.038	0.0051	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)

Lab Sample ID: 500-121505-1

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.5

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	☼	12/23/16 17:58	12/27/16 11:04	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Bis(2-ethylhexyl) phthalate	<0.19	F1	0.19	0.069	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Di-n-octyl phthalate	<0.19	F1	0.19	0.062	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Benzo[b]fluoranthene	0.011	J	0.038	0.0082	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Dibenz(a,h)anthracene	<0.038	F1	0.038	0.0073	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
Benzo[g,h,i]perylene	<0.038	F1	0.038	0.012	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 17:58	12/27/16 11:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/23/16 17:58	12/27/16 11:04	1
Phenol-d5	85		36 - 123	12/23/16 17:58	12/27/16 11:04	1
Nitrobenzene-d5	79		33 - 124	12/23/16 17:58	12/27/16 11:04	1
2-Fluorobiphenyl	77		42 - 115	12/23/16 17:58	12/27/16 11:04	1
2,4,6-Tribromophenol	81		25 - 130	12/23/16 17:58	12/27/16 11:04	1
Terphenyl-d14	91		25 - 150	12/23/16 17:58	12/27/16 11:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J F1	0.95	0.20	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Arsenic	4.0		0.47	0.22	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Barium	78		0.47	0.087	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Beryllium	0.59		0.19	0.041	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Boron	2.5		2.4	0.33	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Cadmium	<0.095		0.095	0.027	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Calcium	14000		9.5	3.0	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Chromium	15	B	0.47	0.081	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Cobalt	5.8		0.24	0.053	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Copper	12		0.47	0.10	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Iron	15000		9.5	3.6	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Lead	9.1		0.24	0.12	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Magnesium	8100		4.7	1.9	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Manganese	290		0.47	0.094	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Nickel	14		0.47	0.13	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Potassium	780	F1	24	3.9	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Selenium	0.46	J F1	0.47	0.23	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Silver	<0.24		0.24	0.055	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Sodium	100		47	6.2	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Thallium	0.98		0.47	0.23	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Vanadium	26		0.24	0.069	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1
Zinc	32		0.95	0.30	mg/Kg	☼	12/21/16 08:13	12/23/16 23:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		12/22/16 13:46	12/23/16 12:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:46	12/23/16 12:19	1
Boron	0.054	J	0.50	0.050	mg/L		12/22/16 13:46	12/23/16 12:19	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)

Lab Sample ID: 500-121505-1

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.5

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	-	12/22/16 13:46	12/23/16 12:19	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Manganese	0.66		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:19	1
Zinc	0.035	J	0.50	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:19	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	-	12/22/16 14:01	12/24/16 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	-	12/22/16 13:46	12/23/16 12:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:46	12/23/16 12:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/22/16 14:30	12/23/16 09:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.018	0.0093	mg/Kg	☼	12/20/16 13:30	12/21/16 09:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		12/21/16 13:42	1

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)D

Lab Sample ID: 500-121505-2

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/15/16 16:33	12/19/16 19:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 120	12/15/16 16:33	12/19/16 19:31	1
Dibromofluoromethane	116		75 - 120	12/15/16 16:33	12/19/16 19:31	1
1,2-Dichloroethane-d4 (Surr)	120		69 - 134	12/15/16 16:33	12/19/16 19:31	1
Toluene-d8 (Surr)	107		75 - 123	12/15/16 16:33	12/19/16 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	0.081	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)D

Lab Sample ID: 500-121505-2

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Phenanthrene	0.0078	J	0.036	0.0051	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Fluoranthene	0.020	J	0.036	0.0068	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Pyrene	0.017	J	0.036	0.0072	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Benzo[a]anthracene	0.0093	J	0.036	0.0049	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)D

Lab Sample ID: 500-121505-2

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.012	J	0.036	0.0099	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Benzo[b]fluoranthene	0.016	J	0.036	0.0079	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Benzo[a]pyrene	0.011	J	0.036	0.0071	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 11:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	77		40 - 130				12/23/16 17:58	12/27/16 11:32	1
Phenol-d5	74		36 - 123				12/23/16 17:58	12/27/16 11:32	1
Nitrobenzene-d5	68		33 - 124				12/23/16 17:58	12/27/16 11:32	1
2-Fluorobiphenyl	69		42 - 115				12/23/16 17:58	12/27/16 11:32	1
2,4,6-Tribromophenol	83		25 - 130				12/23/16 17:58	12/27/16 11:32	1
Terphenyl-d14	90		25 - 150				12/23/16 17:58	12/27/16 11:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.0	0.21	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Arsenic	4.6		0.52	0.24	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Barium	71		0.52	0.094	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Beryllium	0.59		0.21	0.045	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Boron	2.6		2.6	0.36	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Cadmium	<0.10		0.10	0.030	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Calcium	15000		10	3.3	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Chromium	15	B	0.52	0.089	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Cobalt	6.5		0.26	0.058	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Copper	13		0.52	0.11	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Iron	16000		10	4.0	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Lead	10		0.26	0.13	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Magnesium	8600		5.2	2.1	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Manganese	310		0.52	0.10	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Nickel	15		0.52	0.14	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Potassium	810		26	4.2	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Selenium	0.50	J	0.52	0.26	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Sodium	110		52	6.8	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Thallium	0.92		0.52	0.25	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Vanadium	26		0.26	0.075	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1
Zinc	36		1.0	0.33	mg/Kg	☼	12/21/16 08:13	12/23/16 23:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		12/22/16 13:46	12/23/16 12:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:46	12/23/16 12:23	1
Boron	0.062	J	0.50	0.050	mg/L		12/22/16 13:46	12/23/16 12:23	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (0-7)D

Lab Sample ID: 500-121505-2

Date Collected: 12/14/16 15:00

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 86.3

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	-	12/22/16 13:46	12/23/16 12:23	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Manganese	0.55		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:23	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.15		0.025	0.010	mg/L	-	12/22/16 14:01	12/24/16 04:32	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	-	12/22/16 13:46	12/23/16 12:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:46	12/23/16 12:52	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	-	12/22/16 14:30	12/23/16 09:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.017	0.0092	mg/Kg	☼	12/20/16 13:30	12/21/16 09:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		12/21/16 13:48	1

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (7-13)

Lab Sample ID: 500-121505-3

Date Collected: 12/14/16 15:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 82.8

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	☼	12/15/16 16:33	12/19/16 19:57	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/15/16 16:33	12/19/16 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 120	12/15/16 16:33	12/19/16 19:57	1
Dibromofluoromethane	118		75 - 120	12/15/16 16:33	12/19/16 19:57	1
1,2-Dichloroethane-d4 (Surr)	121		69 - 134	12/15/16 16:33	12/19/16 19:57	1
Toluene-d8 (Surr)	106		75 - 123	12/15/16 16:33	12/19/16 19:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (7-13)

Lab Sample ID: 500-121505-3

Date Collected: 12/14/16 15:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Naphthalene	0.0063	J	0.038	0.0059	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Acenaphthylene	0.0087	J	0.038	0.0051	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Phenanthrene	0.026	J	0.038	0.0054	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Anthracene	0.0067	J	0.038	0.0064	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Fluoranthene	0.15		0.038	0.0072	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Pyrene	0.15		0.038	0.0077	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Benzo[a]anthracene	0.092		0.038	0.0052	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (7-13)

Lab Sample ID: 500-121505-3

Date Collected: 12/14/16 15:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.089		0.038	0.011	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Benzo[b]fluoranthene	0.12		0.038	0.0083	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Benzo[k]fluoranthene	0.061		0.038	0.011	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Benzo[a]pyrene	0.094		0.038	0.0075	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Indeno[1,2,3-cd]pyrene	0.047		0.038	0.010	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Dibenz(a,h)anthracene	0.013	J	0.038	0.0075	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
Benzo[g,h,i]perylene	0.053		0.038	0.012	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 17:58	12/27/16 12:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		40 - 130	12/23/16 17:58	12/27/16 12:00	1
Phenol-d5	75		36 - 123	12/23/16 17:58	12/27/16 12:00	1
Nitrobenzene-d5	67		33 - 124	12/23/16 17:58	12/27/16 12:00	1
2-Fluorobiphenyl	68		42 - 115	12/23/16 17:58	12/27/16 12:00	1
2,4,6-Tribromophenol	67		25 - 130	12/23/16 17:58	12/27/16 12:00	1
Terphenyl-d14	81		25 - 150	12/23/16 17:58	12/27/16 12:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.47	J	0.99	0.21	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Arsenic	5.8		0.49	0.23	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Barium	64		0.49	0.091	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Beryllium	0.63		0.20	0.043	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Boron	4.8		2.5	0.35	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Cadmium	0.076	J	0.099	0.029	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Calcium	4500		9.9	3.2	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Chromium	14	B	0.49	0.085	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Cobalt	6.6		0.25	0.056	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Copper	14		0.49	0.11	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Iron	15000		9.9	3.8	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Lead	19		0.25	0.12	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Magnesium	1700		4.9	2.0	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Manganese	390		0.49	0.098	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Nickel	15		0.49	0.13	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Potassium	900		25	4.0	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Selenium	0.57		0.49	0.24	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Silver	<0.25		0.25	0.058	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Sodium	94		49	6.5	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Thallium	1.0		0.49	0.24	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Vanadium	24		0.25	0.072	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	1
Zinc	56		0.99	0.31	mg/Kg	☼	12/21/16 08:13	12/23/16 23:41	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		12/22/16 13:46	12/23/16 12:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:46	12/23/16 12:28	1
Boron	0.12	J	0.50	0.050	mg/L		12/22/16 13:46	12/23/16 12:28	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B02 (7-13)

Lab Sample ID: 500-121505-3

Date Collected: 12/14/16 15:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 82.8

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	-	12/22/16 13:46	12/23/16 12:28	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Manganese	0.26		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:28	1
Zinc	0.14	J	0.50	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.074		0.025	0.010	mg/L	-	12/22/16 14:01	12/24/16 04:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 13:46	12/23/16 12:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:46	12/23/16 12:56	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	-	12/22/16 14:30	12/23/16 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.018	0.0094	mg/Kg	☼	12/20/16 13:30	12/21/16 10:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU	-		12/21/16 13:55	1

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B07 (0-8)

Lab Sample ID: 500-121505-4

Date Collected: 12/14/16 15:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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	☼	12/15/16 16:33	12/19/16 20:24	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/15/16 16:33	12/19/16 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/15/16 16:33	12/19/16 20:24	1
Dibromofluoromethane	116		75 - 120	12/15/16 16:33	12/19/16 20:24	1
1,2-Dichloroethane-d4 (Surr)	126		69 - 134	12/15/16 16:33	12/19/16 20:24	1
Toluene-d8 (Surr)	108		75 - 123	12/15/16 16:33	12/19/16 20:24	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	☼	12/23/16 17:58	12/27/16 14:47	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B07 (0-8)

Lab Sample ID: 500-121505-4

Date Collected: 12/14/16 15:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2-Methylnaphthalene	0.0070	J	0.074	0.0067	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Phenanthrene	0.031	J	0.036	0.0051	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Fluoranthene	0.035	J	0.036	0.0068	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Pyrene	0.035	J	0.036	0.0073	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Benzo[a]anthracene	0.018	J	0.036	0.0049	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B07 (0-8)

Lab Sample ID: 500-121505-4

Date Collected: 12/14/16 15:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.021	J	0.036	0.010	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Benzo[b]fluoranthene	0.026	J	0.036	0.0079	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Benzo[a]pyrene	0.020	J	0.036	0.0071	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 14:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	85		40 - 130	12/23/16 17:58	12/27/16 14:47	1
Phenol-d5	84		36 - 123	12/23/16 17:58	12/27/16 14:47	1
Nitrobenzene-d5	76		33 - 124	12/23/16 17:58	12/27/16 14:47	1
2-Fluorobiphenyl	77		42 - 115	12/23/16 17:58	12/27/16 14:47	1
2,4,6-Tribromophenol	48		25 - 130	12/23/16 17:58	12/27/16 14:47	1
Terphenyl-d14	95		25 - 150	12/23/16 17:58	12/27/16 14:47	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	0.97	0.20	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Arsenic	3.5		0.49	0.23	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Barium	48		0.49	0.089	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Beryllium	0.52		0.19	0.042	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Boron	6.4		2.4	0.34	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Cadmium	<0.097		0.097	0.028	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Calcium	110000		97	31	mg/Kg	☼	12/21/16 08:13	12/27/16 20:46	10
Chromium	13	B	0.49	0.084	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Cobalt	4.4		0.24	0.055	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Copper	12		0.49	0.11	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Iron	12000		9.7	3.8	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Lead	16		0.24	0.12	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Magnesium	30000		4.9	2.0	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Manganese	320		0.49	0.096	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Nickel	11		0.49	0.13	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Potassium	1000		24	4.0	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Selenium	<0.49		0.49	0.24	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Silver	<0.24		0.24	0.057	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Sodium	480		49	6.4	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Thallium	0.95		0.49	0.24	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Vanadium	19		0.24	0.071	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	1
Zinc	24		0.97	0.31	mg/Kg	☼	12/21/16 08:13	12/23/16 23:48	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		12/22/16 13:46	12/23/16 12:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:46	12/23/16 12:33	1
Boron	0.082	J	0.50	0.050	mg/L		12/22/16 13:46	12/23/16 12:33	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B07 (0-8)

Lab Sample ID: 500-121505-4

Date Collected: 12/14/16 15:35

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.1

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		12/22/16 13:46	12/23/16 12:33	1
Chromium	<0.025		0.025	0.010	mg/L		12/22/16 13:46	12/23/16 12:33	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/22/16 13:46	12/23/16 12:33	1
Iron	<0.40		0.40	0.20	mg/L		12/22/16 13:46	12/23/16 12:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/22/16 13:46	12/23/16 12:33	1
Manganese	2.9		0.025	0.010	mg/L		12/22/16 13:46	12/23/16 12:33	1
Nickel	0.026		0.025	0.010	mg/L		12/22/16 13:46	12/23/16 12:33	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/16 13:46	12/23/16 12:33	1
Silver	<0.025		0.025	0.010	mg/L		12/22/16 13:46	12/23/16 12:33	1
Zinc	0.041	J	0.50	0.020	mg/L		12/22/16 13:46	12/23/16 12:33	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		12/22/16 14:01	12/24/16 04:46	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		12/22/16 13:46	12/23/16 12:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/16 13:46	12/23/16 12:59	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		12/22/16 14:30	12/23/16 09:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.018	0.0096	mg/Kg	☼	12/20/16 13:30	12/21/16 10:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			12/21/16 14:01	1

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B04 (0-5.3)

Lab Sample ID: 500-121505-5

Date Collected: 12/14/16 16:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.045		0.018	0.0080	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
2-Butanone (MEK)	0.0084		0.0046	0.0020	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 20:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 120	12/15/16 16:33	12/19/16 20:50	1
Dibromofluoromethane	116		75 - 120	12/15/16 16:33	12/19/16 20:50	1
1,2-Dichloroethane-d4 (Surr)	122		69 - 134	12/15/16 16:33	12/19/16 20:50	1
Toluene-d8 (Surr)	120		75 - 123	12/15/16 16:33	12/19/16 20:50	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	☼	12/23/16 17:58	12/27/16 15:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B04 (0-5.3)

Lab Sample ID: 500-121505-5

Date Collected: 12/14/16 16:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Naphthalene	0.036	J	0.038	0.0058	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2-Methylnaphthalene	0.060	J	0.076	0.0070	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Acenaphthylene	0.0068	J	0.038	0.0050	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Acenaphthene	0.0086	J	0.038	0.0068	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Fluorene	0.0070	J	0.038	0.0053	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Phenanthrene	0.16		0.038	0.0053	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Anthracene	0.022	J	0.038	0.0063	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Fluoranthene	0.20		0.038	0.0070	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Pyrene	0.18		0.038	0.0075	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Benzo[a]anthracene	0.090		0.038	0.0051	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B04 (0-5.3)

Lab Sample ID: 500-121505-5

Date Collected: 12/14/16 16:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.11		0.038	0.010	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Benzo[b]fluoranthene	0.15		0.038	0.0082	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Benzo[k]fluoranthene	0.051		0.038	0.011	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Benzo[a]pyrene	0.094		0.038	0.0073	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Indeno[1,2,3-cd]pyrene	0.038		0.038	0.0098	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Dibenz(a,h)anthracene	0.013	J	0.038	0.0073	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
Benzo[g,h,i]perylene	0.045		0.038	0.012	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 17:58	12/27/16 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		40 - 130	12/23/16 17:58	12/27/16 15:15	1
Phenol-d5	80		36 - 123	12/23/16 17:58	12/27/16 15:15	1
Nitrobenzene-d5	76		33 - 124	12/23/16 17:58	12/27/16 15:15	1
2-Fluorobiphenyl	76		42 - 115	12/23/16 17:58	12/27/16 15:15	1
2,4,6-Tribromophenol	78		25 - 130	12/23/16 17:58	12/27/16 15:15	1
Terphenyl-d14	90		25 - 150	12/23/16 17:58	12/27/16 15:15	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	☼	12/21/16 08:13	12/24/16 00:10	1
Arsenic	5.3		0.53	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Barium	38		0.53	0.097	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Beryllium	0.40		0.21	0.046	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Boron	4.0		2.7	0.37	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Cadmium	0.13		0.11	0.031	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Calcium	18000		11	3.4	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Chromium	12	B	0.53	0.091	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Cobalt	4.8		0.27	0.060	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Copper	11		0.53	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Iron	12000		11	4.1	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Lead	17		0.27	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Magnesium	5200		5.3	2.2	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Manganese	220		0.53	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Nickel	13		0.53	0.14	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Potassium	550		27	4.3	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Selenium	0.53		0.53	0.26	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Sodium	370		53	7.0	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Thallium	0.71		0.53	0.26	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Vanadium	18		0.27	0.078	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1
Zinc	62		1.1	0.34	mg/Kg	☼	12/21/16 08:13	12/24/16 00:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		12/22/16 13:46	12/23/16 12:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:46	12/23/16 12:45	1
Boron	0.067	J	0.50	0.050	mg/L		12/22/16 13:46	12/23/16 16:13	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B04 (0-5.3)

Lab Sample ID: 500-121505-5

Date Collected: 12/14/16 16:10

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0033	J	0.0050	0.0020	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 16:13	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Manganese	2.4		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Nickel	0.020	J	0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:45	1
Zinc	0.10	J	0.50	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:45	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	-	12/22/16 14:01	12/24/16 04:53	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	-	12/22/16 13:46	12/23/16 13:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:46	12/23/16 13:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/22/16 14:30	12/23/16 09:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058		0.018	0.0097	mg/Kg	☼	12/20/16 13:30	12/21/16 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/21/16 14:07	1

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B08 (0-4.4)

Lab Sample ID: 500-121505-6

Date Collected: 12/14/16 16:25

Matrix: Solid

Date Received: 12/15/16 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	0.051		0.017	0.0075	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
2-Butanone (MEK)	0.011		0.0043	0.0019	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	12/15/16 16:33	12/19/16 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/15/16 16:33	12/19/16 21:16	1
Dibromofluoromethane	115		75 - 120	12/15/16 16:33	12/19/16 21:16	1
1,2-Dichloroethane-d4 (Surr)	125		69 - 134	12/15/16 16:33	12/19/16 21:16	1
Toluene-d8 (Surr)	110		75 - 123	12/15/16 16:33	12/19/16 21:16	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	☼	12/23/16 17:58	12/27/16 15:42	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B08 (0-4.4)

Lab Sample ID: 500-121505-6

Date Collected: 12/14/16 16:25

Matrix: Solid

Date Received: 12/15/16 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	<0.18		0.18	0.043	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Naphthalene	0.033	J	0.036	0.0055	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2-Methylnaphthalene	0.066	J	0.072	0.0066	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Acenaphthylene	0.0071	J	0.036	0.0047	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Acenaphthene	0.012	J	0.036	0.0064	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Fluorene	0.013	J	0.036	0.0050	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Pentachlorophenol	<0.72		0.72	0.58	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Phenanthrene	0.22		0.036	0.0050	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Anthracene	0.041		0.036	0.0060	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Fluoranthene	0.30		0.036	0.0066	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Pyrene	0.25		0.036	0.0071	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Benzo[a]anthracene	0.13		0.036	0.0048	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B08 (0-4.4)

Lab Sample ID: 500-121505-6

Date Collected: 12/14/16 16:25

Matrix: Solid

Date Received: 12/15/16 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	0.15		0.036	0.0098	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Benzo[b]fluoranthene	0.22		0.036	0.0077	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Benzo[k]fluoranthene	0.072		0.036	0.011	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Benzo[a]pyrene	0.13		0.036	0.0069	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Indeno[1,2,3-cd]pyrene	0.051		0.036	0.0093	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Dibenz(a,h)anthracene	0.015	J	0.036	0.0069	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Benzo[g,h,i]perylene	0.054		0.036	0.012	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
3 & 4 Methylphenol	0.29		0.18	0.060	mg/Kg	☼	12/23/16 17:58	12/27/16 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		40 - 130				12/23/16 17:58	12/27/16 15:42	1
Phenol-d5	79		36 - 123				12/23/16 17:58	12/27/16 15:42	1
Nitrobenzene-d5	69		33 - 124				12/23/16 17:58	12/27/16 15:42	1
2-Fluorobiphenyl	70		42 - 115				12/23/16 17:58	12/27/16 15:42	1
2,4,6-Tribromophenol	89		25 - 130				12/23/16 17:58	12/27/16 15:42	1
Terphenyl-d14	94		25 - 150				12/23/16 17:58	12/27/16 15:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44	J	1.0	0.21	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Arsenic	2.3		0.51	0.24	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Barium	40		0.51	0.094	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Beryllium	0.77		0.20	0.044	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Boron	17		2.6	0.36	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Cadmium	0.11		0.10	0.030	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Calcium	6700		10	3.3	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Chromium	7.3	B	0.51	0.088	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Cobalt	2.3		0.26	0.058	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Copper	7.8		0.51	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Iron	11000		10	3.9	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Lead	9.2		0.26	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Magnesium	1000		5.1	2.1	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Manganese	110		0.51	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Nickel	6.6		0.51	0.14	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Potassium	410		26	4.2	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Selenium	0.58		0.51	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Sodium	340		51	6.8	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Thallium	0.30	J	0.51	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Vanadium	9.7		0.26	0.075	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	1
Zinc	71		1.0	0.32	mg/Kg	☼	12/21/16 08:13	12/24/16 00:17	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		12/22/16 13:46	12/23/16 12:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:46	12/23/16 12:50	1
Boron	0.10	J	0.50	0.050	mg/L		12/22/16 13:46	12/23/16 16:17	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121505-1

Client Sample ID: 1314V3-18-B08 (0-4.4)

Lab Sample ID: 500-121505-6

Date Collected: 12/14/16 16:25

Matrix: Solid

Date Received: 12/15/16 10:00

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0048	J	0.0050	0.0020	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 16:17	1
Cobalt	0.031		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Lead	0.012		0.0075	0.0075	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Manganese	4.7		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Nickel	0.040		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:46	12/23/16 12:50	1
Zinc	0.34	J	0.50	0.020	mg/L	-	12/22/16 13:46	12/23/16 12:50	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.092		0.0075	0.0075	mg/L	-	12/22/16 14:01	12/24/16 04:59	1
Manganese	0.65		0.025	0.010	mg/L	-	12/22/16 14:01	12/24/16 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	-	12/22/16 13:46	12/23/16 13:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:46	12/23/16 13:06	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	-	12/22/16 14:30	12/23/16 09:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.018	0.0092	mg/Kg	☼	12/20/16 13:30	12/21/16 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/21/16 14:13	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121505-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
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: 500-121505-1

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



500-121505 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 #: 500-121505
Chain of Custody Number: E846-40
Page _____ of _____
Temperature °C of Cooler: 3.7

Client		Client Project #		Preservative		Parameter		Matrix		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 #		Sampling		Containers		Matrix			
Project Location/State		Lab PM		Date	Time	# of	Matrix				
EE		1009008 0046-01								VOC SVOC Tot/Ind TAC WOB TCCP/SPM TAC WOB PH/O% Solids	
I74		50012744									
Rock Island County IL		D. Wright									
S. Cooper											
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
1		1314V3-18-B02(0-7)	12-14-16	1500	2	S	X	X	X		X
2		1314V3-18-B02(0-7)D	12-14-16	1500	2	S	X	X	X		X
3		1314V3-18-B02(7-13)	12-14-16	1510	2	S	X	X	X		X
4		1314V3-18-B07(0-8)	12-14-16	1535	2	S	X	X	X	X	
5		1314V3-18-B04(0-5.3)	12-14-16	1610	2	S	X	X	X	X	
6		1314V3-18-B08(0-4.4)	12-14-16	1625	2	S	X	X	X	X	
7		1314V3-18-B09(0-8)	12-14-16	1700	2	S	X	X	X	X	
_____ 12-14-16											

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>EE</u>	Date: <u>12-14-16</u>	Time: <u>1730</u>	Received By: <u>[Signature]</u>	Company: <u>TA-EPE</u>	Date: <u>12/15/16</u>	Time: <u>1000</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: _____
Shipped: Fed-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: 500-121505-1

Login Number: 121505

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	3.7
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):

1900-2200 blocks of 4th Avenue (ISGS #1314V3-21)

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: 41.51024 Longitude: -90.5089
(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: 41.51024 Longitude: -90.5089

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):

Location 1314V3-21-B01 was sampled within the construction zone adjacent to ISGS #1314V3-21 (BNSF Railroad). Refer to PSI Report for ISGS #1314V3-21 (BNSF Railroad) including Table 4-4, and Figures 4-2 and 4-10.

- 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 J120748-3.

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.

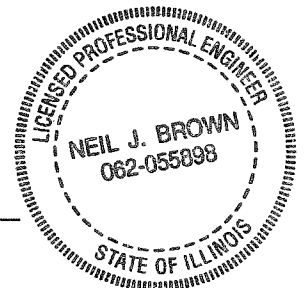
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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
 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

3/17/17
 Date:



Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-21 (BNSF Railroad)		Comparison Criteria					
	1314V3-21-B01		MACs			TACO		
SAMPLE	1314V3-21-B01 (0-5)	1314V3-21-B01 (5-10)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil						
DEPTH (feet)	0-5	5-10						
pH	7.5	7.8						
VOCs (mg/kg)								
2-Butanone (MEK)	ND U	ND U	--	--	--	--	--	--
Acetone	0.023	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)								
2-Methylnaphthalene	0.056 J	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	0.033 J	ND U	--	--	--	--	--	--
Anthracene	0.032 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.11	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.13 †	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.2	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.052	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.071	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	0.07 J	46	--	--	46	4,100	--
Chrysene	0.12	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.022 J	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.19	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.061	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.02 J	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.13	ND U	--	--	--	--	--	--
Pyrene	0.18	ND U	2,300	--	--	2,300	61,000	--
PCBs (mg/kg)								
PCB-1260	ND U	0.012 J	1	--	--	1	1	--
PCBs, total	ND	0.012	--	--	--	--	--	--
Inorganics (mg/kg)								
Antimony	2.2 J	0.32 J	5	--	--	31	82	--
Arsenic	9	4.3	11.3	13	--	13	61	--
Barium	140	53	1,500	--	--	5,500	14,000	--
Beryllium	1.5	0.45	22	--	--	160	410	--
Boron	22	2.9	40	--	--	16,000	41,000	--
Cadmium	1.4	0.06 J	5.2	--	--	78	200	--
Calcium	6,400	2,200	--	--	--	--	--	--
Chromium	14	11	21	--	--	230	690	--
Cobalt	8.4	5.7	20	--	--	4,700	12,000	--
Copper	70	8.7	2,900	--	--	2,900	8,200	--
Iron	48,000 †m	12,000	15,000	15,900	--	--	--	--
Lead	82	5.6	107	--	--	400	700	--
Magnesium	1,100	1,500	325,000	--	--	--	730,000	--
Manganese	500	480	630	636	--	1,600	4,100	--
Mercury	0.038	0.015 J	0.89	--	--	10	0.1	--
Nickel	24	12	100	--	--	1,600	4,100	--
Potassium	640	590	--	--	--	--	--	--
Selenium	2.3 J †	0.33 J	1.3	--	--	390	1,000	--
Sodium	470	170	--	--	--	--	--	--
Thallium	3 J †	1.1	2.6	--	--	6.3	160	--
Vanadium	26	22	550	--	--	550	1,400	--
Zinc	330	22	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Antimony	ND U	ND U	--	--	--	--	--	0.006
Barium	0.24 J	0.24 J	--	--	--	--	--	2
Boron	ND U	ND U	--	--	--	--	--	2
Cadmium	ND U	ND U	--	--	--	--	--	0.005
Cobalt	ND U	ND U	--	--	--	--	--	1
Iron	0.31 J	ND U	--	--	--	--	--	5
Lead	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.4 L	ND U	--	--	--	--	--	0.15
Nickel	ND U	ND U	--	--	--	--	--	0.1
Selenium	ND U	ND U	--	--	--	--	--	0.05
Thallium	ND U	ND U	--	--	--	--	--	0.002
Zinc	0.29 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)								
Antimony	NA	NA	--	--	--	--	--	0.006
Lead	NA	NA	--	--	--	--	--	0.0075
Manganese	0.32 L	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: 500-120748-3
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 3:50:33 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

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

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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Case Narrative

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

TestAmerica Job ID: 500-120748-3

Job ID: 500-120748-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120748-3

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

PCBs were added to lab samples 3-6 per communication with E&E 12/5.

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 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.

GC Semi VOA

Method(s) 8082A: The following samples required a mercury clean-up, via EPA Method 3660A, to reduce matrix interferences caused by sulfur: 1314V3-21-B02 (0-6) (500-120748-3), 1314V3-21-B02 (0-6)D (500-120748-4) and 1314V3-21-B01 (0-5) (500-120748-5). The reagent lot number used was: 153166.

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.

Method(s) 6010B: The following samples was diluted due to the nature of the sample matrix: 1314V3-21-B02 (0-6) (500-120748-3), 1314V3-21-B02 (0-6)D (500-120748-4) and 1314V3-21-B01 (0-5) (500-120748-5). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The following samples was diluted due to the nature of the sample matrix: 1314V3-21-B02 (0-6) (500-120748-3), 1314V3-21-B02 (0-6)D (500-120748-4) and 1314V3-21-B01 (0-5) (500-120748-5). Elevated reporting limits (RLs) are provided.

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: 500-120748-3

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Client Sample ID: 1314V3-21-B01 (0-5)

Lab Sample ID: 500-120748-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.023		0.018	0.0079	mg/Kg	1	✳		8260B	Total/NA
Naphthalene	0.020	J	0.042	0.0065	mg/Kg	1	✳		8270D	Total/NA
2-Methylnaphthalene	0.056	J	0.086	0.0078	mg/Kg	1	✳		8270D	Total/NA
Acenaphthylene	0.033	J	0.042	0.0056	mg/Kg	1	✳		8270D	Total/NA
Phenanthrene	0.13		0.042	0.0059	mg/Kg	1	✳		8270D	Total/NA
Anthracene	0.032	J	0.042	0.0071	mg/Kg	1	✳		8270D	Total/NA
Fluoranthene	0.19		0.042	0.0079	mg/Kg	1	✳		8270D	Total/NA
Pyrene	0.18		0.042	0.0084	mg/Kg	1	✳		8270D	Total/NA
Benzo[a]anthracene	0.11		0.042	0.0057	mg/Kg	1	✳		8270D	Total/NA
Chrysene	0.12		0.042	0.012	mg/Kg	1	✳		8270D	Total/NA
Benzo[b]fluoranthene	0.20		0.042	0.0092	mg/Kg	1	✳		8270D	Total/NA
Benzo[k]fluoranthene	0.071		0.042	0.013	mg/Kg	1	✳		8270D	Total/NA
Benzo[a]pyrene	0.13		0.042	0.0082	mg/Kg	1	✳		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.061		0.042	0.011	mg/Kg	1	✳		8270D	Total/NA
Dibenz(a,h)anthracene	0.022	J	0.042	0.0082	mg/Kg	1	✳		8270D	Total/NA
Benzo[g,h,i]perylene	0.052		0.042	0.014	mg/Kg	1	✳		8270D	Total/NA
Antimony	2.2	J	6.2	1.3	mg/Kg	5	✳		6010B	Total/NA
Arsenic	9.0		3.1	1.4	mg/Kg	5	✳		6010B	Total/NA
Barium	140		3.1	0.56	mg/Kg	5	✳		6010B	Total/NA
Beryllium	1.5		1.2	0.27	mg/Kg	5	✳		6010B	Total/NA
Boron	22		15	2.2	mg/Kg	5	✳		6010B	Total/NA
Cadmium	1.4		0.62	0.18	mg/Kg	5	✳		6010B	Total/NA
Calcium	6400	B	62	20	mg/Kg	5	✳		6010B	Total/NA
Chromium	14	B	3.1	0.53	mg/Kg	5	✳		6010B	Total/NA
Cobalt	8.4		1.5	0.35	mg/Kg	5	✳		6010B	Total/NA
Copper	70		3.1	0.67	mg/Kg	5	✳		6010B	Total/NA
Iron	48000	B ^	62	24	mg/Kg	5	✳		6010B	Total/NA
Lead	82		1.5	0.77	mg/Kg	5	✳		6010B	Total/NA
Magnesium	1100		31	13	mg/Kg	5	✳		6010B	Total/NA
Manganese	500		3.1	0.61	mg/Kg	5	✳		6010B	Total/NA
Nickel	24	B	3.1	0.83	mg/Kg	5	✳		6010B	Total/NA
Potassium	640		150	25	mg/Kg	5	✳		6010B	Total/NA
Selenium	2.3	J	3.1	1.5	mg/Kg	5	✳		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: 500-120748-3

Client Sample ID: 1314V3-21-B01 (0-5) (Continued)

Lab Sample ID: 500-120748-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	470		310	41	mg/Kg	5	☼	6010B	Total/NA
Thallium	3.0	J	3.1	1.5	mg/Kg	5	☼	6010B	Total/NA
Vanadium	26		1.5	0.45	mg/Kg	5	☼	6010B	Total/NA
Zinc	330		6.2	1.9	mg/Kg	5	☼	6010B	Total/NA
Barium	0.24	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.17	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.31	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.29	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.32		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038		0.021	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-21-B01 (5-10)

Lab Sample ID: 500-120748-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.070	J	0.19	0.069	mg/Kg	1	☼	8270D	Total/NA
PCB-1260	0.012	J	0.019	0.0094	mg/Kg	1	☼	8082A	Total/NA
Antimony	0.32	J	1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.3		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	53		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.9		2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.060	J	0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	2200	B	11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.7		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	8.7		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B ^	11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	5.6		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1500		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	480		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	590		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	22		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.24	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.066	J B	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.015	J	0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		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: 500-120748-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120748-5	1314V3-21-B01 (0-5)	Solid	11/29/16 12:20	11/30/16 10:20
500-120748-6	1314V3-21-B01 (5-10)	Solid	11/29/16 12:25	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: 500-120748-3

Client Sample ID: 1314V3-21-B01 (0-5)

Lab Sample ID: 500-120748-5

Date Collected: 11/29/16 12:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.023		0.018	0.0079	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	11/30/16 13:20	12/02/16 21:34	1
Dibromofluoromethane	93		75 - 120	11/30/16 13:20	12/02/16 21:34	1
1,2-Dichloroethane-d4 (Surr)	96		69 - 134	11/30/16 13:20	12/02/16 21:34	1
Toluene-d8 (Surr)	103		75 - 123	11/30/16 13:20	12/02/16 21:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.094	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.064	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120748-3

Client Sample ID: 1314V3-21-B01 (0-5)

Lab Sample ID: 500-120748-5

Date Collected: 11/29/16 12:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 77.1

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	0.051	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Hexachloroethane	<0.21		0.21	0.065	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Naphthalene	0.020	J	0.042	0.0065	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Hexachlorocyclopentadiene	<0.86		0.86	0.24	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2-Methylnaphthalene	0.056	J	0.086	0.0078	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,4-Dinitrophenol	<0.86		0.86	0.75	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Acenaphthylene	0.033	J	0.042	0.0056	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
4-Nitrophenol	<0.86		0.86	0.40	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Hexachlorobenzene	<0.086		0.086	0.0098	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Pentachlorophenol	<0.86		0.86	0.68	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
4,6-Dinitro-2-methylphenol	<0.86		0.86	0.34	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Phenanthrene	0.13		0.042	0.0059	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Anthracene	0.032	J	0.042	0.0071	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Carbazole	<0.21	*	0.21	0.11	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Fluoranthene	0.19		0.042	0.0079	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Pyrene	0.18		0.042	0.0084	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Benzo[a]anthracene	0.11		0.042	0.0057	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120748-3

Client Sample ID: 1314V3-21-B01 (0-5)

Lab Sample ID: 500-120748-5

Date Collected: 11/29/16 12:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.12		0.042	0.012	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Benzo[b]fluoranthene	0.20		0.042	0.0092	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Benzo[k]fluoranthene	0.071		0.042	0.013	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Benzo[a]pyrene	0.13		0.042	0.0082	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Indeno[1,2,3-cd]pyrene	0.061		0.042	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Dibenz(a,h)anthracene	0.022	J	0.042	0.0082	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
Benzo[g,h,i]perylene	0.052		0.042	0.014	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		40 - 130	12/06/16 16:39	12/07/16 13:44	1
Phenol-d5	78		36 - 123	12/06/16 16:39	12/07/16 13:44	1
Nitrobenzene-d5	64		33 - 124	12/06/16 16:39	12/07/16 13:44	1
2-Fluorobiphenyl	61		42 - 115	12/06/16 16:39	12/07/16 13:44	1
2,4,6-Tribromophenol	48		25 - 130	12/06/16 16:39	12/07/16 13:44	1
Terphenyl-d14	71		25 - 150	12/06/16 16:39	12/07/16 13:44	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.021		0.021	0.0073	mg/Kg	☼	12/06/16 19:00	12/07/16 13:31	1
PCB-1221	<0.021		0.021	0.0091	mg/Kg	☼	12/06/16 19:00	12/07/16 13:31	1
PCB-1232	<0.021		0.021	0.0090	mg/Kg	☼	12/06/16 19:00	12/07/16 13:31	1
PCB-1242	<0.021		0.021	0.0068	mg/Kg	☼	12/06/16 19:00	12/07/16 13:31	1
PCB-1248	<0.021		0.021	0.0081	mg/Kg	☼	12/06/16 19:00	12/07/16 13:31	1
PCB-1254	<0.021		0.021	0.0044	mg/Kg	☼	12/06/16 19:00	12/07/16 13:31	1
PCB-1260	<0.021		0.021	0.010	mg/Kg	☼	12/06/16 19:00	12/07/16 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	123		41 - 124	12/06/16 19:00	12/07/16 13:31	1
DCB Decachlorobiphenyl	98		47 - 127	12/06/16 19:00	12/07/16 13:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2	J	6.2	1.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Arsenic	9.0		3.1	1.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Barium	140		3.1	0.56	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Beryllium	1.5		1.2	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Boron	22		15	2.2	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Cadmium	1.4		0.62	0.18	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Calcium	6400	B	62	20	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Chromium	14	B	3.1	0.53	mg/Kg	☼	12/02/16 09:27	12/03/16 22:08	5
Cobalt	8.4		1.5	0.35	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Copper	70		3.1	0.67	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Iron	48000	B ^	62	24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Lead	82		1.5	0.77	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Magnesium	1100		31	13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Manganese	500		3.1	0.61	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120748-3

Client Sample ID: 1314V3-21-B01 (0-5)

Lab Sample ID: 500-120748-5

Date Collected: 11/29/16 12:20

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	24	B	3.1	0.83	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Potassium	640		150	25	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Selenium	2.3	J	3.1	1.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Silver	<1.5		1.5	0.36	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Sodium	470		310	41	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Thallium	3.0	J	3.1	1.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Vanadium	26		1.5	0.45	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
Zinc	330		6.2	1.9	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 22:43	1
Boron	0.17	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/02/16 14:06	12/03/16 22:43	1
Chromium	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:43	1
Cobalt	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:43	1
Iron	0.31	J	0.40	0.20	mg/L		12/02/16 14:06	12/03/16 22:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/02/16 14:06	12/03/16 22:43	1
Manganese	1.4		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:43	1
Nickel	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:43	1
Selenium	<0.050		0.050	0.020	mg/L		12/02/16 14:06	12/03/16 22:43	1
Silver	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:43	1
Zinc	0.29	J	0.50	0.020	mg/L		12/02/16 14:06	12/03/16 22:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.32		0.025	0.010	mg/L		12/02/16 14:10	12/05/16 22:38	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		12/02/16 14:06	12/05/16 12:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/02/16 14:06	12/05/16 12:41	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		12/02/16 10:45	12/05/16 12:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.021	0.011	mg/Kg	☼	11/30/16 14:45	12/02/16 09:34	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 17:43	1

Client Sample Results

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

TestAmerica Job ID: 500-120748-3

Client Sample ID: 1314V3-21-B01 (5-10)

Lab Sample ID: 500-120748-6

Date Collected: 11/29/16 12:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 86.0

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	☼	11/30/16 13:20	12/02/16 21:58	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 21:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	11/30/16 13:20	12/02/16 21:58	1
Dibromofluoromethane	96		75 - 120	11/30/16 13:20	12/02/16 21:58	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/30/16 13:20	12/02/16 21:58	1
Toluene-d8 (Surr)	101		75 - 123	11/30/16 13:20	12/02/16 21:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120748-3

Client Sample ID: 1314V3-21-B01 (5-10)

Lab Sample ID: 500-120748-6

Date Collected: 11/29/16 12:25

Matrix: Solid

Date Received: 11/30/16 10:20

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	0.045	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Carbazole	<0.19 *		0.19	0.095	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120748-3

Client Sample ID: 1314V3-21-B01 (5-10)

Lab Sample ID: 500-120748-6

Date Collected: 11/29/16 12:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Bis(2-ethylhexyl) phthalate	0.070	J	0.19	0.069	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/06/16 16:39	12/07/16 11:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	85		40 - 130	12/06/16 16:39	12/07/16 11:24	1
Phenol-d5	86		36 - 123	12/06/16 16:39	12/07/16 11:24	1
Nitrobenzene-d5	71		33 - 124	12/06/16 16:39	12/07/16 11:24	1
2-Fluorobiphenyl	65		42 - 115	12/06/16 16:39	12/07/16 11:24	1
2,4,6-Tribromophenol	28		25 - 130	12/06/16 16:39	12/07/16 11:24	1
Terphenyl-d14	83		25 - 150	12/06/16 16:39	12/07/16 11:24	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019	0.0068	mg/Kg	☼	12/06/16 19:00	12/07/16 10:43	1
PCB-1221	<0.019		0.019	0.0084	mg/Kg	☼	12/06/16 19:00	12/07/16 10:43	1
PCB-1232	<0.019		0.019	0.0083	mg/Kg	☼	12/06/16 19:00	12/07/16 10:43	1
PCB-1242	<0.019		0.019	0.0063	mg/Kg	☼	12/06/16 19:00	12/07/16 10:43	1
PCB-1248	<0.019		0.019	0.0075	mg/Kg	☼	12/06/16 19:00	12/07/16 10:43	1
PCB-1254	<0.019		0.019	0.0041	mg/Kg	☼	12/06/16 19:00	12/07/16 10:43	1
PCB-1260	0.012	J	0.019	0.0094	mg/Kg	☼	12/06/16 19:00	12/07/16 10:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		41 - 124	12/06/16 19:00	12/07/16 10:43	1
DCB Decachlorobiphenyl	91		47 - 127	12/06/16 19:00	12/07/16 10:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.1	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Arsenic	4.3		0.57	0.26	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Barium	53		0.57	0.10	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Beryllium	0.45		0.23	0.049	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Boron	2.9		2.8	0.40	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Cadmium	0.060	J	0.11	0.033	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Calcium	2200	B	11	3.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Chromium	11	B	0.57	0.098	mg/Kg	☼	12/02/16 09:27	12/03/16 22:12	1
Cobalt	5.7		0.28	0.064	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Copper	8.7		0.57	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Iron	12000	B ^	11	4.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Lead	5.6		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Magnesium	1500		5.7	2.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Manganese	480		0.57	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120748-3

Client Sample ID: 1314V3-21-B01 (5-10)

Lab Sample ID: 500-120748-6

Date Collected: 11/29/16 12:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	12	B	0.57	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Potassium	590		28	4.6	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Selenium	0.33	J	0.57	0.28	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Silver	<0.28		0.28	0.067	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Sodium	170		57	7.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Thallium	1.1		0.57	0.28	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Vanadium	22		0.28	0.083	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
Zinc	22		1.1	0.36	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 22:48	1
Boron	0.066	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/02/16 14:06	12/03/16 22:48	1
Chromium	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:48	1
Cobalt	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:48	1
Iron	<0.40		0.40	0.20	mg/L		12/02/16 14:06	12/03/16 22:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/02/16 14:06	12/03/16 22:48	1
Manganese	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:48	1
Nickel	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:48	1
Selenium	<0.050		0.050	0.020	mg/L		12/02/16 14:06	12/03/16 22:48	1
Silver	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:48	1
Zinc	<0.50		0.50	0.020	mg/L		12/02/16 14:06	12/03/16 22:48	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 12:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/02/16 14:06	12/05/16 12:44	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		12/02/16 10:45	12/05/16 12:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.018	0.0096	mg/Kg	☼	11/30/16 14:45	12/02/16 09:35	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 17:50	1

Definitions/Glossary

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

TestAmerica Job ID: 500-120748-3

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.

GC 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: 500-120748-3

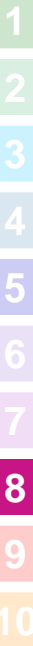
Laboratory: TestAmerica Chicago

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 #: 500-120748
 Chain of Custody Number: EG46-06
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Parameter	Matrix	Parameter	Matrix	Comments
3		1314V3-21-302(0-6)	11/24/16	1145	2 S		UVC				64C08
4		1314V3-21-302(0-6)D	11/24/16	1145	2 S		SOC				
5		1314V3-21-301(0-5)	11/24/16	1220	2 S		Total TAC				
6		1314V3-21-301(570)	11/24/16	1225	2 S		Total TAC/SPW				
							TAC Matrix				
							pH/4 Solids				

- 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: <u>EA</u>	Date: <u>11/24/16</u>	Time: <u>11:15</u>	Received By: <u>Sherril Scott</u>	Company: <u>TA-CENT</u>	Date: <u>11/30/16</u>	Time: <u>10:20</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: 500-120748-3

Login Number: 120748

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.	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	





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):

400 19th Street (ISGS #1314V3-24)

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: 41.50911 Longitude: -90.50995

(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: 1610455138 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: 41.50911 Longitude: -90.50995

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 1314V3-24-B01 and -B09 were sampled within the construction zone adjacent to ISGS #1314V3-24 (John Deere). Refer to PSI Report for ISGS #1314V3-24 (John Deere) including Table 4-4, and Figures 4-2, 4-3, 4-11, and 4-13.

- 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 J121429-1.

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
 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

3/17/17
 Date:



Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-24 (John Deere)		Comparison Criteria						
	1314V3-24-B01	1314V3-24-B09	MACs			TACO			
SAMPLE	1314V3-24-B01 (0-5.8)	1314V3-24-B09 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	
MATRIX	Soil	Soil							
DEPTH (feet)	0-5.8	0-4							
pH	7.8	7.5							
VOCs (mg/kg)									
Tetrachloroethene	ND U	ND U	0.06	--	--	11	28	--	
Xylenes, Total	ND U	ND U	5.6	--	--	320	5.6	--	
SVOCs (mg/kg)									
2-Methylnaphthalene	0.029 J	ND U	--	--	--	--	--	--	
Acenaphthene	0.0094 J	ND U	570	--	--	4,700	120,000	--	
Acenaphthylene	0.012 J	ND U	--	--	--	--	--	--	
Anthracene	0.044	0.0074 J	12,000	--	--	23,000	610,000	--	
Benzo(a)anthracene	0.26	0.028 J	0.9	1.8	1.1	1.8	170	--	
Benzo(a)pyrene	0.25 †	0.042	0.09	2.1	1.3	2.1	17	--	
Benzo(b)fluoranthene	0.44	0.067	0.9	2.1	1.5	2.1	170	--	
Benzo(g,h,i)perylene	0.085	ND UJ	--	--	--	--	--	--	
Benzo(k)fluoranthene	0.15	0.015 J	9	--	--	9	1,700	--	
Bis(2-ethylhexyl) phthalate	ND U	ND U	46	--	--	46	4,100	--	
Carbazole	ND U	ND U	0.6	--	--	32	6,200	--	
Chrysene	0.28	0.044	88	--	--	88	17,000	--	
Dibenz(a,h)anthracene	0.03 J	ND UJ	0.09	0.42	0.2	0.42	17	--	
Dibenzofuran	ND U	ND U	--	--	--	--	--	--	
Fluoranthene	0.58	0.043	3,100	--	--	3,100	82,000	--	
Fluorene	0.008 J	ND U	560	--	--	3,100	82,000	--	
Indeno(1,2,3-cd)pyrene	0.088	0.024 J	0.9	1.6	0.9	1.6	170	--	
Naphthalene	0.018 J	ND U	1.8	--	--	170	1.8	--	
Phenanthrene	0.26	0.032 J	--	--	--	--	--	--	
Pyrene	0.59	0.084 J	2,300	--	--	2,300	61,000	--	
Inorganics (mg/kg)									
Antimony	1.3 J	1.5 J	5	--	--	31	82	--	
Arsenic	4.1	6 J	11.3	13	--	13	61	--	
Barium	270	62 J	1,500	--	--	5,500	14,000	--	
Beryllium	2.9	0.5	22	--	--	160	410	--	
Boron	110 †	5.2 J	40	--	--	16,000	41,000	--	
Cadmium	ND U	0.16 J	5.2	--	--	78	200	--	
Calcium	28,000	47,000 J	--	--	--	--	--	--	
Chromium	21	11	21	--	--	230	690	--	
Cobalt	11	8.4 J	20	--	--	4,700	12,000	--	
Copper	40	15 J	2,900	--	--	2,900	8,200	--	
Iron	71,000 †m	17,000 J †m	15,000	15,900	--	--	--	--	
Lead	52	65 J	107	--	--	400	700	--	
Magnesium	1,200	7,200 J	325,000	--	--	--	730,000	--	
Manganese	250	450 J	630	636	--	1,600	4,100	--	
Mercury	0.025	0.092	0.89	--	--	10	0.1	--	
Nickel	30	19 J	100	--	--	1,600	4,100	--	
Potassium	2,000	700 J	--	--	--	--	--	--	
Selenium	2.4 †	0.41 J	1.3	--	--	390	1,000	--	
Silver	ND U	ND U	4.4	--	--	390	1,000	--	
Sodium	1,500	2,200	--	--	--	--	--	--	
Thallium	ND U	ND U	2.6	--	--	6.3	160	--	
Vanadium	46	19	550	--	--	550	1,400	--	
Zinc	170	74 J	5,100	--	--	23,000	61,000	--	
TCLP Metals (mg/L)									
Antimony	ND U	ND U	--	--	--	--	--	0.006	
Barium	0.21 J	0.42 J	--	--	--	--	--	2	
Boron	0.12 J	0.11 J	--	--	--	--	--	2	
Cadmium	ND U	ND U	--	--	--	--	--	0.005	
Chromium	ND U	ND U	--	--	--	--	--	0.1	
Cobalt	0.013 J	ND U	--	--	--	--	--	1	
Iron	ND U	ND U	--	--	--	--	--	5	
Lead	ND U	ND U	--	--	--	--	--	0.0075	
Manganese	1.6 L	1.9 L	--	--	--	--	--	0.15	
Nickel	0.029	ND U	--	--	--	--	--	0.1	
Selenium	ND U	ND U	--	--	--	--	--	0.05	
Thallium	ND U	ND U	--	--	--	--	--	0.002	
Zinc	ND U	ND U	--	--	--	--	--	5	
SPLP Metals (mg/L)									
Antimony	NA	NA	--	--	--	--	--	0.006	
Lead	NA	NA	--	--	--	--	--	0.0075	
Manganese	ND U	1.2 L	--	--	--	--	--	0.15	

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-121429-1
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:
12/29/2016 2:45:34 PM

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

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

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Case Narrative

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

TestAmerica Job ID: 500-121429-1

Job ID: 500-121429-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121429-1

Comments

No additional comments.

Receipt

The samples were received on 12/14/2016 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 2.0° C and 4.9° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The following samples contained one base/neutral surrogate outside acceptance limits: 1314V3-24-B09 (0-4) (500-121429-1), 1314V3-24-B02 (0-5) (500-121429-9), (500-121429-E-1-Q MS) and (500-121429-E-1-R MSD). 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 matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121429-E-1-Q MS) and (500-121429-E-1-R 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 following samples was diluted due to the nature of the sample matrix: 1314V3-24-B01 (0-5.8) (500-121429-3), 1314V3-24-B04 (0-5) (500-121429-4), 1314V3-24-B03 (0-5) (500-121429-7) and 1314V3-24-B02 (0-5) (500-121429-9). Elevated reporting limits (RLs) are provided.

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: 500-121429-1

Client Sample ID: 1314V3-24-B09 (0-4)

Lab Sample ID: 500-121429-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.032	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0074	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.043		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.084	F1	0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.028	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.044		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.067		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.042		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.024	J F1	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Antimony	1.5	F1	0.95	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.0		0.48	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	62	F1	0.48	0.087	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA
Boron	5.2	F1	2.4	0.33	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	F1	0.095	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	47000	F2	95	31	mg/Kg	10	☼	6010B	Total/NA
Chromium	11	B	0.48	0.082	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.4		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	15	F1	0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		9.5	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	65		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7200	F2	4.8	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	450		0.48	0.095	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	700	F1	24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J F1	0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	2200		48	6.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.24	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	74	F1	0.95	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.42	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.067	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	0.092		0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		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: 500-121429-1



Client Sample ID: 1314V3-24-B01 (0-5.8)

Lab Sample ID: 500-121429-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.018	J	0.037	0.0057	mg/Kg	1	*	*	8270D	Total/NA
2-Methylnaphthalene	0.029	J	0.075	0.0068	mg/Kg	1	*	*	8270D	Total/NA
Acenaphthylene	0.012	J	0.037	0.0049	mg/Kg	1	*	*	8270D	Total/NA
Acenaphthene	0.0094	J	0.037	0.0067	mg/Kg	1	*	*	8270D	Total/NA
Fluorene	0.0080	J	0.037	0.0052	mg/Kg	1	*	*	8270D	Total/NA
Phenanthrene	0.26		0.037	0.0052	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: 500-121429-1

Client Sample ID: 1314V3-24-B01 (0-5.8) (Continued)

Lab Sample ID: 500-121429-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.044		0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.58		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.59		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.26		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.28		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.44		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.15		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.25		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.088		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.030	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.085		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	1.3	J	4.6	0.96	mg/Kg	5	☼	6010B	Total/NA
Arsenic	4.1		2.3	1.1	mg/Kg	5	☼	6010B	Total/NA
Barium	270		2.3	0.43	mg/Kg	5	☼	6010B	Total/NA
Beryllium	2.9		0.93	0.20	mg/Kg	5	☼	6010B	Total/NA
Boron	110		12	1.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	28000		46	15	mg/Kg	5	☼	6010B	Total/NA
Chromium	21	B	2.3	0.40	mg/Kg	5	☼	6010B	Total/NA
Cobalt	11		1.2	0.26	mg/Kg	5	☼	6010B	Total/NA
Copper	40		2.3	0.50	mg/Kg	5	☼	6010B	Total/NA
Iron	71000		46	18	mg/Kg	5	☼	6010B	Total/NA
Lead	52		1.2	0.58	mg/Kg	5	☼	6010B	Total/NA
Magnesium	1200		23	9.4	mg/Kg	5	☼	6010B	Total/NA
Manganese	250		2.3	0.46	mg/Kg	5	☼	6010B	Total/NA
Nickel	30		2.3	0.63	mg/Kg	5	☼	6010B	Total/NA
Potassium	2000		120	19	mg/Kg	5	☼	6010B	Total/NA
Selenium	2.4		2.3	1.2	mg/Kg	5	☼	6010B	Total/NA
Sodium	1500		230	31	mg/Kg	5	☼	6010B	Total/NA
Vanadium	46		1.2	0.34	mg/Kg	5	☼	6010B	Total/NA
Zinc	170		4.6	1.5	mg/Kg	5	☼	6010B	Total/NA
Barium	0.21	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.029		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.025		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		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: 500-121429-1

Client Sample ID: 1314V3-24-B02 (5-10) (Continued)

Lab Sample ID: 500-121429-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	20		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	29		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.40		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.039		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.020	0.011	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: 500-121429-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121429-1	1314V3-24-B09 (0-4)	Solid	12/13/16 10:50	12/14/16 10:30
500-121429-3	1314V3-24-B01 (0-5.8)	Solid	12/13/16 15:10	12/14/16 10:30

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Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B09 (0-4)

Lab Sample ID: 500-121429-1

Date Collected: 12/13/16 10:50

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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	☼	12/14/16 15:00	12/15/16 13:13	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1
Xylenes, Total	<0.0032		0.0032	0.00050	mg/Kg	☼	12/14/16 15:00	12/15/16 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 120	12/14/16 15:00	12/15/16 13:13	1
Dibromofluoromethane	96		75 - 120	12/14/16 15:00	12/15/16 13:13	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/14/16 15:00	12/15/16 13:13	1
Toluene-d8 (Surr)	107		75 - 123	12/14/16 15:00	12/15/16 13:13	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	☼	12/22/16 15:26	12/23/16 21:37	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B09 (0-4)

Lab Sample ID: 500-121429-1

Date Collected: 12/13/16 10:50

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Hexachlorocyclopentadiene	<0.74	F1	0.74	0.21	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,4-Dinitrophenol	<0.74	F1	0.74	0.64	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Pentachlorophenol	<0.74	F2	0.74	0.59	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
4,6-Dinitro-2-methylphenol	<0.74	F1	0.74	0.29	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Phenanthrene	0.032	J	0.036	0.0051	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Anthracene	0.0074	J	0.036	0.0061	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Fluoranthene	0.043		0.036	0.0068	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Pyrene	0.084	F1	0.036	0.0073	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Butyl benzyl phthalate	<0.18	F1	0.18	0.069	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Benzo[a]anthracene	0.028	J	0.036	0.0049	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B09 (0-4)

Lab Sample ID: 500-121429-1

Date Collected: 12/13/16 10:50

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.044		0.036	0.010	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
3,3'-Dichlorobenzidine	<0.18	F1	0.18	0.051	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Bis(2-ethylhexyl) phthalate	<0.18	F1	0.18	0.067	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Di-n-octyl phthalate	<0.18	F1	0.18	0.060	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Benzo[b]fluoranthene	0.067		0.036	0.0079	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Benzo[k]fluoranthene	0.015 J		0.036	0.011	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Benzo[a]pyrene	0.042		0.036	0.0071	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Indeno[1,2,3-cd]pyrene	0.024 J F1		0.036	0.0095	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Dibenz(a,h)anthracene	<0.036	F1	0.036	0.0071	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
Benzo[g,h,i]perylene	<0.036	F1	0.036	0.012	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/22/16 15:26	12/23/16 21:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	87		40 - 130	12/22/16 15:26	12/23/16 21:37	1
Phenol-d5	88		36 - 123	12/22/16 15:26	12/23/16 21:37	1
Nitrobenzene-d5	66		33 - 124	12/22/16 15:26	12/23/16 21:37	1
2-Fluorobiphenyl	79		42 - 115	12/22/16 15:26	12/23/16 21:37	1
2,4,6-Tribromophenol	103		25 - 130	12/22/16 15:26	12/23/16 21:37	1
Terphenyl-d14	168 X		25 - 150	12/22/16 15:26	12/23/16 21:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5 F1		0.95	0.20	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Arsenic	6.0		0.48	0.22	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Barium	62 F1		0.48	0.087	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Beryllium	0.50		0.19	0.041	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Boron	5.2 F1		2.4	0.33	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Cadmium	0.16 F1		0.095	0.028	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Calcium	47000 F2		95	31	mg/Kg	☼	12/21/16 08:24	12/22/16 18:47	10
Chromium	11 B		0.48	0.082	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Cobalt	8.4		0.24	0.054	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Copper	15 F1		0.48	0.10	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Iron	17000		9.5	3.7	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Lead	65		0.24	0.12	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Magnesium	7200 F2		4.8	1.9	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Manganese	450		0.48	0.095	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Nickel	19		0.48	0.13	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Potassium	700 F1		24	3.9	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Selenium	0.41 J F1		0.48	0.24	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Silver	<0.24		0.24	0.056	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Sodium	2200		48	6.3	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Thallium	<0.48		0.48	0.23	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Vanadium	19		0.24	0.070	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1
Zinc	74 F1		0.95	0.30	mg/Kg	☼	12/21/16 08:24	12/21/16 21:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.42 J		0.50	0.050	mg/L		12/20/16 14:37	12/21/16 19:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/20/16 14:37	12/21/16 19:59	1
Boron	0.11 J		0.50	0.050	mg/L		12/20/16 14:37	12/21/16 19:59	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B09 (0-4)

Lab Sample ID: 500-121429-1

Date Collected: 12/13/16 10:50

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/20/16 14:37	12/21/16 19:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 19:59	1
Cobalt	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 19:59	1
Iron	<0.40		0.40	0.20	mg/L		12/20/16 14:37	12/21/16 19:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/20/16 14:37	12/21/16 19:59	1
Manganese	1.9		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 19:59	1
Nickel	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 19:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/20/16 14:37	12/21/16 19:59	1
Silver	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 19:59	1
Zinc	0.067	J B	0.50	0.020	mg/L		12/20/16 14:37	12/21/16 19:59	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		12/20/16 14:34	12/22/16 02:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/20/16 14:37	12/21/16 11:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/20/16 14:37	12/21/16 11:47	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/20/16 14:00	12/21/16 11:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.092		0.017	0.0091	mg/Kg	☼	12/20/16 07:00	12/20/16 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			12/20/16 21:16	1

Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B01 (0-5.8)

Lab Sample ID: 500-121429-3

Date Collected: 12/13/16 15:10

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.023		0.023	0.0098	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Benzene	<0.0023		0.0023	0.00058	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Bromodichloromethane	<0.0023		0.0023	0.00046	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Bromoform	<0.0023		0.0023	0.00066	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
2-Butanone (MEK)	<0.0056		0.0056	0.0025	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Carbon disulfide	<0.0056		0.0056	0.0012	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Carbon tetrachloride	<0.0023		0.0023	0.00065	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Chlorobenzene	<0.0023		0.0023	0.00083	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Chloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Chloroform	<0.0023		0.0023	0.00078	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Chloromethane	<0.0056		0.0056	0.0023	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00063	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00068	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Dibromochloromethane	<0.0023		0.0023	0.00074	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,1-Dichloroethane	<0.0023		0.0023	0.00077	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,2-Dichloroethane	<0.0056		0.0056	0.0018	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,1-Dichloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,2-Dichloropropane	<0.0023		0.0023	0.00058	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,3-Dichloropropane, Total	<0.0023		0.0023	0.00079	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
2-Hexanone	<0.0056		0.0056	0.0018	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Methylene Chloride	<0.0056		0.0056	0.0022	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0017	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00066	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Styrene	<0.0023		0.0023	0.00068	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,1,1,2-Tetrachloroethane	<0.0023		0.0023	0.00072	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Tetrachloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Toluene	<0.0023		0.0023	0.00057	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00079	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,1,1-Trichloroethane	<0.0023		0.0023	0.00076	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00097	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Trichloroethene	<0.0023		0.0023	0.00076	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Vinyl acetate	<0.0056		0.0056	0.0020	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1
Xylenes, Total	<0.0045		0.0045	0.00072	mg/Kg	☼	12/14/16 15:00	12/16/16 12:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/14/16 15:00	12/16/16 12:22	1
Dibromofluoromethane	101		75 - 120	12/14/16 15:00	12/16/16 12:22	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/14/16 15:00	12/16/16 12:22	1
Toluene-d8 (Surr)	108		75 - 123	12/14/16 15:00	12/16/16 12:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B01 (0-5.8)

Lab Sample ID: 500-121429-3

Date Collected: 12/13/16 15:10

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 86.7

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	0.044	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Naphthalene	0.018	J	0.037	0.0057	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2-Methylnaphthalene	0.029	J	0.075	0.0068	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Acenaphthylene	0.012	J	0.037	0.0049	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Acenaphthene	0.0094	J	0.037	0.0067	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Fluorene	0.0080	J	0.037	0.0052	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Phenanthrene	0.26		0.037	0.0052	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Anthracene	0.044		0.037	0.0062	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Fluoranthene	0.58		0.037	0.0069	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Pyrene	0.59		0.037	0.0074	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Benzo[a]anthracene	0.26		0.037	0.0050	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B01 (0-5.8)

Lab Sample ID: 500-121429-3

Date Collected: 12/13/16 15:10

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.28		0.037	0.010	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Benzo[b]fluoranthene	0.44		0.037	0.0080	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Benzo[k]fluoranthene	0.15		0.037	0.011	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Benzo[a]pyrene	0.25		0.037	0.0072	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Indeno[1,2,3-cd]pyrene	0.088		0.037	0.0096	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Dibenz(a,h)anthracene	0.030	J	0.037	0.0072	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
Benzo[g,h,i]perylene	0.085		0.037	0.012	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/22/16 15:26	12/23/16 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/22/16 15:26	12/23/16 19:11	1
Phenol-d5	87		36 - 123	12/22/16 15:26	12/23/16 19:11	1
Nitrobenzene-d5	74		33 - 124	12/22/16 15:26	12/23/16 19:11	1
2-Fluorobiphenyl	78		42 - 115	12/22/16 15:26	12/23/16 19:11	1
2,4,6-Tribromophenol	90		25 - 130	12/22/16 15:26	12/23/16 19:11	1
Terphenyl-d14	110		25 - 150	12/22/16 15:26	12/23/16 19:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	4.6	0.96	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Arsenic	4.1		2.3	1.1	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Barium	270		2.3	0.43	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Beryllium	2.9		0.93	0.20	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Boron	110		12	1.6	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Cadmium	<0.46		0.46	0.13	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Calcium	28000		46	15	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Chromium	21	B	2.3	0.40	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Cobalt	11		1.2	0.26	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Copper	40		2.3	0.50	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Iron	71000		46	18	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Lead	52		1.2	0.58	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Magnesium	1200		23	9.4	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Manganese	250		2.3	0.46	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Nickel	30		2.3	0.63	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Potassium	2000		120	19	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Selenium	2.4		2.3	1.2	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Silver	<1.2		1.2	0.27	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Sodium	1500		230	31	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Thallium	<2.3		2.3	1.1	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Vanadium	46		1.2	0.34	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5
Zinc	170		4.6	1.5	mg/Kg	☼	12/21/16 08:24	12/21/16 22:26	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.21	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 20:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/20/16 14:37	12/21/16 20:28	1
Boron	0.12	J	0.50	0.050	mg/L		12/20/16 14:37	12/21/16 20:28	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121429-1

Client Sample ID: 1314V3-24-B01 (0-5.8)

Lab Sample ID: 500-121429-3

Date Collected: 12/13/16 15:10

Matrix: Solid

Date Received: 12/14/16 10:30

Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/20/16 14:37	12/21/16 20:28	1
Chromium	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 20:28	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/20/16 14:37	12/21/16 20:28	1
Iron	<0.40		0.40	0.20	mg/L		12/20/16 14:37	12/21/16 20:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/20/16 14:37	12/21/16 20:28	1
Manganese	1.6		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 20:28	1
Nickel	0.029		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 20:28	1
Selenium	<0.050		0.050	0.020	mg/L		12/20/16 14:37	12/21/16 20:28	1
Silver	<0.025		0.025	0.010	mg/L		12/20/16 14:37	12/21/16 20:28	1
Zinc	0.14	J B	0.50	0.020	mg/L		12/20/16 14:37	12/21/16 20:28	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		12/20/16 14:34	12/22/16 03:01	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		12/20/16 14:37	12/21/16 11:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/20/16 14:37	12/21/16 11:54	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		12/20/16 14:00	12/21/16 11:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.019	0.010	mg/Kg	☼	12/20/16 07:00	12/20/16 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/21/16 11:53	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121429-1

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit
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: 500-121429-1

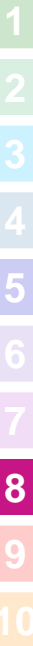
Laboratory: TestAmerica Chicago

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 ENVIRONMENT!

2417 Bond Street, University Park, IL
 Phone: 708.534.5200 Fax: 708.5



500-121429 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 #: 500-121429
 Chain of Custody Number: E846-35
 Page _____ of _____
 Temperature °C of Cooler: 20,469

- 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

Client		Client Project #		Preservative							Comments
Project Name		Lab Project #		Parameter							
Project Location/State		Lab RM		# of Containers	Matrix						
Sampler											
Lab ID	M/S/MSD	Sample ID	Date	Time							
1		1314V3-24-B09(0-4)	12/13/16	1050	2 S	X	X	X	X	X	
2		1314V3-24-B10(0-5)	12/13/16	1445	2 S	X	X	X	X	X	
3		1314V3-24-B01(0-5)	12/11/16	1570	2 S	X	X	X	X	X	
4		1314V3-24-B04(0-5)	12/13/16	1605	2 S	X	X	X	X	X	
5		1314V3-24-B04(5-10)	12/13/16	1610	2 S	X	X	X	X	X	
6		1314V3-24-B04(5-10) D	12/13/16	1610	2 S	X	X	X	X	X	
7		1314V3-24-B03(0-5)	12/13/16	1635	2 S	X	X	X	X	X	
8		1314V3-24-B03(5-10)	12/13/16	1640	2 S	X	X	X	X	X	
9		1314V3-24-B02(0-5)	12/13/16	1715	2 S	X	X	X	X	X	
10		1314V3-24-B02(5-10)	12/13/16	1730	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

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>12-13-16</u>	Time: <u>1800</u>	Received By: <u>[Signature]</u>	Company: <u>EA-OTI</u>	Date: <u>12/14/16</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: Fed-X
 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: 500-121429-1

Login Number: 121429

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	2.0,4.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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):

400 21st Street (ISGS #1314V3-25)

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: 41.50998 Longitude: -90.50832

(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: 1610455040 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: 41.50998 Longitude: -90.50832Uncontaminated 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 1314V3-25-B04 and -B07 were sampled within the construction zone adjacent to ISGS #1314V3-25 (Sivyer Steel Corp.). Refer to PSI Report for ISGS #1314V3-25 (Sivyer Steel Corp.) including Table 4-4, and Figures 4-2 and 4-11.

- 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 J120663-1.

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

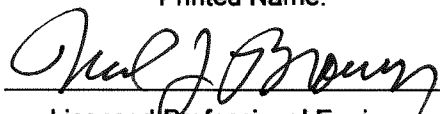
I, Neil J. Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental 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:


3/17/17

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 64C08 - 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.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-25 (Sivyer Steel Corp.)				Comparison Criteria					
	1314V3-25-B04		1314V3-25-B07		MACs			TACO		
BORING	1314V3-25-B04		1314V3-25-B07		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-25-B04 (0-6)	1314V3-25-B04 (6-12)	1314V3-25-B07 (0-6)	1314V3-25-B07 (6-12)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	0-6	6-12						
pH	8.1	8.1	7.4	8						
VOCs (None Detected)										
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.0067 J	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.016 J	0.015 J	0.022 J	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.016 J	0.012 J	0.027 J	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.018 J	0.015 J	0.029 J	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	0.013 J	ND U	9	--	--	9	1,700	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.016 J	0.014 J	0.02 J	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	0.033 J	0.03 J	0.026 J	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	0.011 J	ND U	0.014 J	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	0.031 J	0.026 J	0.0075 J	ND U	--	--	--	--	--	--
Pyrene	0.029 J	0.023 J	0.026 J	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	1.1	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	5.5	6.2	4.2	3.6	11.3	13	--	13	61	--
Barium	88	87	71	110	1,500	--	--	5,500	14,000	--
Beryllium	0.7	0.49	0.47	0.47	22	--	--	160	410	--
Boron	ND U	ND U	ND U	ND U	40	--	--	16,000	41,000	--
Cadmium	0.49	0.29	0.18	0.12	5.2	--	--	78	200	--
Calcium	5,300	7,800	4,100	8,000	--	--	--	--	--	--
Chromium	ND U	15	ND U	ND U	21	--	--	230	690	--
Cobalt	7.1	11	7	7.5	20	--	--	4,700	12,000	--
Copper	15	13	10	9.6	2,900	--	--	2,900	8,200	--
Iron	18,000 †m	14,000	13,000	14,000	15,000	15,900	--	--	--	--
Lead	63	11	13	9.3	107	--	--	400	700	--
Magnesium	1,600	4,700	2,300	5,000	325,000	--	--	--	730,000	--
Manganese	340	570	400	250	630	636	--	1,600	4,100	--
Mercury	0.14	0.026	0.055	0.027	0.89	--	--	10	0.1	--
Nickel	17	25	17	14	100	--	--	1,600	4,100	--
Potassium	530	750	680	690	--	--	--	--	--	--
Selenium	0.77	0.59 J	0.58 J	0.43 J	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	85	87	53 J	72	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	20	24	18	18	550	--	--	550	1,400	--
Zinc	120	45	45	43	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Antimony	ND U	ND U	ND U	ND U	--	--	--	--	--	0.006
Barium	0.47 J	0.62	0.63	0.42 J	--	--	--	--	--	2
Boron	ND U	ND U	ND U	ND U	--	--	--	--	--	2
Cadmium	ND U	0.0022 J	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	0.34 J	ND U	0.24 J	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.1	0.34 L	0.17 L	0.67 L	--	--	--	--	--	0.15
Nickel	ND U	0.022 J	ND U	ND U	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.085 J	0.034 J	0.033 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Antimony	NA	NA	NA	NA	--	--	--	--	--	0.006
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	0.24 L	0.16 L	0.15	--	--	--	--	--	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: 500-120663-1
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:
12/6/2016 4:15:47 PM

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

LINKS

Review your project
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.

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Case Narrative

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

TestAmerica Job ID: 500-120663-1

Job ID: 500-120663-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120663-1

Comments

No additional comments.

Receipt

The samples were received on 11/29/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° 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 samples contained one acid surrogate outside acceptance limits: 1314V3-25-B01 (0-6) (500-120663-8) and 1314V3-25-B02 (6-12) (500-120663-11). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-120663-E-1-J MS) and (500-120663-E-1-K 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 following samples was diluted due to the nature of the sample matrix: 1314V3-25-B06 (0-6) (500-120663-4), 1314V3-25-B01 (0-6) (500-120663-8) and 1314V3-25-B05 (0-6) (500-120663-12). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The method blank for preparation batch 500-362833 and analytical batch 500-363271 contained Chromium above the reporting limit (RL). Associated samples 1314V3-25-B06 (0-6) (500-120663-4), 1314V3-25-B01 (0-6) (500-120663-8), 1314V3-25-B01 (6-12) (500-120663-9) and 1314V3-25-B05 (0-6) (500-120663-12) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

General Chemistry

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

Organic Prep

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

Detection Summary

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

TestAmerica Job ID: 500-120663-1

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Client Sample ID: 1314V3-25-B04 (0-6)

Lab Sample ID: 500-120663-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Phenanthrene	0.031	J	0.040	0.0056	mg/Kg	1	☼	☼	8270D	Total/NA
Anthracene	0.0067	J	0.040	0.0067	mg/Kg	1	☼	☼	8270D	Total/NA
Fluoranthene	0.033	J	0.040	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Pyrene	0.029	J	0.040	0.0080	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]anthracene	0.016	J	0.040	0.0054	mg/Kg	1	☼	☼	8270D	Total/NA
Chrysene	0.016	J	0.040	0.011	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.018	J	0.040	0.0086	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]pyrene	0.016	J	0.040	0.0078	mg/Kg	1	☼	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.011	J	0.040	0.010	mg/Kg	1	☼	☼	8270D	Total/NA
Antimony	1.1		1.1	0.23	mg/Kg	1	☼	☼	6010B	Total/NA
Arsenic	5.5		0.56	0.26	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	88		0.56	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: 500-120663-1

Client Sample ID: 1314V3-25-B04 (0-6) (Continued)

Lab Sample ID: 500-120663-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.70		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	6.9	B	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.49		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	5300		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.1		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	63		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1600	B	5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	340	B	0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	530	B	28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.77		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	85	B	56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.47	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.26	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.34	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.10		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.085	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.14		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-25-B04 (6-12)

Lab Sample ID: 500-120663-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.026	J	0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.030	J	0.042	0.0078	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.042	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.015	J	0.042	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.014	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.015	J	0.042	0.0091	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.012	J	0.042	0.0082	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.2		0.62	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	87		0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.25	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	4.4	B	3.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.29		0.12	0.036	mg/Kg	1	☼	6010B	Total/NA
Calcium	7800		12	4.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.31	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.62	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	12	4.8	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4700	B	6.2	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	570	B	0.62	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	25		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	750	B	31	5.1	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: 500-120663-1

Client Sample ID: 1314V3-25-B04 (6-12) (Continued)

Lab Sample ID: 500-120663-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.59	J	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Sodium	87	B	62	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.31	0.091	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.17	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.34		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.034	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		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: 500-120663-1

Client Sample ID: 1314V3-25-B07 (0-6)

Lab Sample ID: 500-120663-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0075	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.026	J	0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.026	J	0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.022	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.020	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.029	J	0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.013	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.027	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.014	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.2		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	71		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	3.6	B	3.0	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	4100		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2300	B	5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	400	B	0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	680	B	30	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.58	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	53	J B	59	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.30	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.16	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.24	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.033	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.16		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.055		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	7.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-25-B07 (6-12)

Lab Sample ID: 500-120663-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.6		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	110		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	2.8	J B	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	8000		12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.5		0.30	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	9.6		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	12	4.7	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: 500-120663-1

Client Sample ID: 1314V3-25-B07 (6-12) (Continued)

Lab Sample ID: 500-120663-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.3		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5000	B	6.0	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	250	B	0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	690	B	30	4.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.43	J	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	72	B	60	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.30	0.088	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.42	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.67		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.15		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		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: 500-120663-1

Client Sample ID: 1314V3-25-B05 (6-12) (Continued)

Lab Sample ID: 500-120663-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.050	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.28	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	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
Mercury	0.021		0.021	0.011	mg/Kg	1	*	7471B	Total/NA
pH	7.0		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: 500-120663-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120663-2	1314V3-25-B04 (0-6)	Solid	11/28/16 12:30	11/29/16 09:25
500-120663-3	1314V3-25-B04 (6-12)	Solid	11/28/16 12:35	11/29/16 09:25
500-120663-6	1314V3-25-B07 (0-6)	Solid	11/28/16 14:00	11/29/16 09:25
500-120663-7	1314V3-25-B07 (6-12)	Solid	11/28/16 14:05	11/29/16 09:25

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (0-6)

Lab Sample ID: 500-120663-2

Date Collected: 11/28/16 12:30

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 82.7

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	☼	11/29/16 12:20	12/02/16 14:59	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	11/29/16 12:20	12/02/16 14:59	1
Dibromofluoromethane	97		75 - 120	11/29/16 12:20	12/02/16 14:59	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/29/16 12:20	12/02/16 14:59	1
Toluene-d8 (Surr)	104		75 - 123	11/29/16 12:20	12/02/16 14:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (0-6)

Lab Sample ID: 500-120663-2

Date Collected: 11/28/16 12:30

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 82.7

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	☼	12/02/16 07:34	12/02/16 21:25	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Phenanthrene	0.031	J	0.040	0.0056	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Anthracene	0.0067	J	0.040	0.0067	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Fluoranthene	0.033	J	0.040	0.0074	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Pyrene	0.029	J	0.040	0.0080	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Benzo[a]anthracene	0.016	J	0.040	0.0054	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (0-6)

Lab Sample ID: 500-120663-2

Date Collected: 11/28/16 12:30

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.016	J	0.040	0.011	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Benzo[b]fluoranthene	0.018	J	0.040	0.0086	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Benzo[a]pyrene	0.016	J	0.040	0.0078	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Indeno[1,2,3-cd]pyrene	0.011	J	0.040	0.010	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/02/16 07:34	12/02/16 21:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/02/16 07:34	12/02/16 21:25	1
Phenol-d5	96		36 - 123	12/02/16 07:34	12/02/16 21:25	1
Nitrobenzene-d5	81		33 - 124	12/02/16 07:34	12/02/16 21:25	1
2-Fluorobiphenyl	84		42 - 115	12/02/16 07:34	12/02/16 21:25	1
2,4,6-Tribromophenol	72		25 - 130	12/02/16 07:34	12/02/16 21:25	1
Terphenyl-d14	87		25 - 150	12/02/16 07:34	12/02/16 21:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1		1.1	0.23	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Arsenic	5.5		0.56	0.26	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Barium	88		0.56	0.10	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Beryllium	0.70		0.22	0.048	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Boron	6.9	B	2.8	0.39	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Cadmium	0.49		0.11	0.032	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Calcium	5300		11	3.6	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Chromium	12	B	0.56	0.096	mg/Kg	☼	11/29/16 15:07	12/03/16 05:43	1
Cobalt	7.1		0.28	0.063	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Copper	15		0.56	0.12	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Iron	18000	B	11	4.3	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Lead	63		0.28	0.14	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Magnesium	1600	B	5.6	2.3	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Manganese	340	B	0.56	0.11	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Nickel	17		0.56	0.15	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Potassium	530	B	28	4.6	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Selenium	0.77		0.56	0.28	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Sodium	85	B	56	7.4	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Vanadium	20		0.28	0.082	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1
Zinc	120		1.1	0.35	mg/Kg	☼	11/29/16 15:07	12/01/16 19:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.47	J	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 21:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 21:19	1
Boron	0.26	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 21:19	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (0-6)

Lab Sample ID: 500-120663-2

Date Collected: 11/28/16 12:30

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Iron	0.34	J	0.40	0.20	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Manganese	0.10		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Silver	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:19	1
Zinc	0.085	J	0.50	0.020	mg/L	-	12/02/16 14:06	12/03/16 21:19	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	-	12/02/16 14:06	12/05/16 11:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/02/16 14:06	12/05/16 11:29	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	-	12/02/16 10:45	12/05/16 11:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.018	0.0096	mg/Kg	☼	11/29/16 14:30	11/30/16 08:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU	-		11/30/16 13:28	1

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (6-12)

Lab Sample ID: 500-120663-3

Date Collected: 11/28/16 12:35

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.023		0.023	0.0098	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Benzene	<0.0023		0.0023	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Bromodichloromethane	<0.0023		0.0023	0.00046	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Bromoform	<0.0023		0.0023	0.00066	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
2-Butanone (MEK)	<0.0056		0.0056	0.0025	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Carbon disulfide	<0.0056		0.0056	0.0012	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Carbon tetrachloride	<0.0023		0.0023	0.00066	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Chlorobenzene	<0.0023		0.0023	0.00083	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Chloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Chloroform	<0.0023		0.0023	0.00078	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Chloromethane	<0.0056		0.0056	0.0023	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00063	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00068	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Dibromochloromethane	<0.0023		0.0023	0.00074	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,1-Dichloroethane	<0.0023		0.0023	0.00077	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,2-Dichloroethane	<0.0056		0.0056	0.0018	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,1-Dichloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,2-Dichloropropane	<0.0023		0.0023	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00079	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
2-Hexanone	<0.0056		0.0056	0.0018	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Methylene Chloride	<0.0056		0.0056	0.0022	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0017	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00066	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Styrene	<0.0023		0.0023	0.00068	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00072	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Tetrachloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Toluene	<0.0023		0.0023	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00079	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,1,1-Trichloroethane	<0.0023		0.0023	0.00076	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00097	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Trichloroethene	<0.0023		0.0023	0.00076	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Vinyl acetate	<0.0056		0.0056	0.0020	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1
Xylenes, Total	<0.0045		0.0045	0.00072	mg/Kg	☼	11/29/16 12:20	12/02/16 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	11/29/16 12:20	12/02/16 15:24	1
Dibromofluoromethane	94		75 - 120	11/29/16 12:20	12/02/16 15:24	1
1,2-Dichloroethane-d4 (Surr)	94		69 - 134	11/29/16 12:20	12/02/16 15:24	1
Toluene-d8 (Surr)	100		75 - 123	11/29/16 12:20	12/02/16 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.094	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (6-12)

Lab Sample ID: 500-120663-3

Date Collected: 11/28/16 12:35

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 76.5

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	0.050	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Phenanthrene	0.026	J	0.042	0.0059	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Fluoranthene	0.030	J	0.042	0.0078	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Pyrene	0.023	J	0.042	0.0084	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Benzo[a]anthracene	0.015	J	0.042	0.0057	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (6-12)

Lab Sample ID: 500-120663-3

Date Collected: 11/28/16 12:35

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.014	J	0.042	0.011	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Benzo[b]fluoranthene	0.015	J	0.042	0.0091	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Benzo[a]pyrene	0.012	J	0.042	0.0082	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/02/16 07:34	12/02/16 21:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		40 - 130	12/02/16 07:34	12/02/16 21:55	1
Phenol-d5	93		36 - 123	12/02/16 07:34	12/02/16 21:55	1
Nitrobenzene-d5	76		33 - 124	12/02/16 07:34	12/02/16 21:55	1
2-Fluorobiphenyl	79		42 - 115	12/02/16 07:34	12/02/16 21:55	1
2,4,6-Tribromophenol	60		25 - 130	12/02/16 07:34	12/02/16 21:55	1
Terphenyl-d14	84		25 - 150	12/02/16 07:34	12/02/16 21:55	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.26	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Arsenic	6.2		0.62	0.29	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Barium	87		0.62	0.11	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Beryllium	0.49		0.25	0.054	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Boron	4.4	B	3.1	0.43	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Cadmium	0.29		0.12	0.036	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Calcium	7800		12	4.0	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Chromium	15	B	0.62	0.11	mg/Kg	☼	11/29/16 15:07	12/03/16 06:06	1
Cobalt	11		0.31	0.070	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Copper	13		0.62	0.13	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Iron	14000	B	12	4.8	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Lead	11		0.31	0.15	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Magnesium	4700	B	6.2	2.5	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Manganese	570	B	0.62	0.12	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Nickel	25		0.62	0.17	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Potassium	750	B	31	5.1	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Selenium	0.59	J	0.62	0.31	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Silver	<0.31		0.31	0.073	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Sodium	87	B	62	8.2	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Vanadium	24		0.31	0.091	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1
Zinc	45		1.2	0.39	mg/Kg	☼	11/29/16 15:07	12/01/16 19:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/02/16 14:06	12/03/16 21:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 21:23	1
Boron	0.17	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 21:23	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B04 (6-12)

Lab Sample ID: 500-120663-3

Date Collected: 11/28/16 12:35

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 76.5

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	-	12/02/16 14:06	12/03/16 21:23	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Iron	<0.40		0.40	0.20	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Manganese	0.34		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Nickel	0.022	J	0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Silver	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 21:23	1
Zinc	0.034	J	0.50	0.020	mg/L	-	12/02/16 14:06	12/03/16 21:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.24		0.025	0.010	mg/L	-	12/02/16 14:10	12/05/16 20:32	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	-	12/02/16 14:06	12/05/16 11:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/02/16 14:06	12/05/16 11:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/02/16 10:45	12/05/16 11:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.010	mg/Kg	☼	11/29/16 14:30	11/30/16 08:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU	-		11/30/16 13:30	1

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (0-6)

Lab Sample ID: 500-120663-6

Date Collected: 11/28/16 14:00

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.7

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	☼	11/29/16 12:20	12/02/16 16:38	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/29/16 12:20	12/02/16 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	11/29/16 12:20	12/02/16 16:38	1
Dibromofluoromethane	99		75 - 120	11/29/16 12:20	12/02/16 16:38	1
1,2-Dichloroethane-d4 (Surr)	98		69 - 134	11/29/16 12:20	12/02/16 16:38	1
Toluene-d8 (Surr)	100		75 - 123	11/29/16 12:20	12/02/16 16:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (0-6)

Lab Sample ID: 500-120663-6

Date Collected: 11/28/16 14:00

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.7

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	☼	12/02/16 07:34	12/02/16 23:22	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Phenanthrene	0.0075	J	0.038	0.0054	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Fluoranthene	0.026	J	0.038	0.0072	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Pyrene	0.026	J	0.038	0.0077	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Benzo[a]anthracene	0.022	J	0.038	0.0052	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (0-6)

Lab Sample ID: 500-120663-6

Date Collected: 11/28/16 14:00

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.7

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	0.011	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Benzo[b]fluoranthene	0.029	J	0.038	0.0083	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Benzo[k]fluoranthene	0.013	J	0.038	0.011	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Benzo[a]pyrene	0.027	J	0.038	0.0075	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Indeno[1,2,3-cd]pyrene	0.014	J	0.038	0.010	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/02/16 07:34	12/02/16 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/02/16 07:34	12/02/16 23:22	1
Phenol-d5	95		36 - 123	12/02/16 07:34	12/02/16 23:22	1
Nitrobenzene-d5	78		33 - 124	12/02/16 07:34	12/02/16 23:22	1
2-Fluorobiphenyl	83		42 - 115	12/02/16 07:34	12/02/16 23:22	1
2,4,6-Tribromophenol	46		25 - 130	12/02/16 07:34	12/02/16 23:22	1
Terphenyl-d14	87		25 - 150	12/02/16 07:34	12/02/16 23:22	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	☼	11/29/16 15:07	12/01/16 19:43	1
Arsenic	4.2		0.59	0.27	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Barium	71		0.59	0.11	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Beryllium	0.47		0.24	0.051	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Boron	3.6	B	3.0	0.41	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Cadmium	0.18		0.12	0.034	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Calcium	4100		12	3.8	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Chromium	12	B	0.59	0.10	mg/Kg	☼	11/29/16 15:07	12/03/16 06:20	1
Cobalt	7.0		0.30	0.067	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Copper	10		0.59	0.13	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Iron	13000	B	12	4.6	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Lead	13		0.30	0.15	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Magnesium	2300	B	5.9	2.4	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Manganese	400	B	0.59	0.12	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Nickel	17		0.59	0.16	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Potassium	680	B	30	4.8	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Selenium	0.58	J	0.59	0.29	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Silver	<0.30		0.30	0.069	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Sodium	53	J B	59	7.8	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Vanadium	18		0.30	0.086	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	1
Zinc	45		1.2	0.37	mg/Kg	☼	11/29/16 15:07	12/01/16 19:43	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		12/02/16 14:06	12/03/16 21:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 21:38	1
Boron	0.16	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 21:38	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (0-6)

Lab Sample ID: 500-120663-6

Date Collected: 11/28/16 14:00

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/02/16 14:06	12/03/16 21:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:38	1
Cobalt	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:38	1
Iron	0.24	J	0.40	0.20	mg/L		12/02/16 14:06	12/03/16 21:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/02/16 14:06	12/03/16 21:38	1
Manganese	0.17		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:38	1
Nickel	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:38	1
Selenium	<0.050		0.050	0.020	mg/L		12/02/16 14:06	12/03/16 21:38	1
Silver	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:38	1
Zinc	0.033	J	0.50	0.020	mg/L		12/02/16 14:06	12/03/16 21:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.16		0.025	0.010	mg/L		12/02/16 14:10	12/05/16 21:08	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		12/02/16 14:06	12/05/16 11:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/02/16 14:06	12/05/16 11:46	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/02/16 10:45	12/05/16 12:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.020	0.010	mg/Kg	☼	11/29/16 14:30	11/30/16 09:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU			11/30/16 13:40	1

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (6-12)

Lab Sample ID: 500-120663-7

Date Collected: 11/28/16 14:05

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.3

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	☼	11/29/16 12:20	12/02/16 17:03	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	11/29/16 12:20	12/02/16 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	11/29/16 12:20	12/02/16 17:03	1
Dibromofluoromethane	98		75 - 120	11/29/16 12:20	12/02/16 17:03	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	11/29/16 12:20	12/02/16 17:03	1
Toluene-d8 (Surr)	100		75 - 123	11/29/16 12:20	12/02/16 17:03	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	☼	12/02/16 07:34	12/02/16 23:51	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (6-12)

Lab Sample ID: 500-120663-7

Date Collected: 11/28/16 14:05

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2-Methylnaphthalene	<0.082		0.082	0.0074	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (6-12)

Lab Sample ID: 500-120663-7

Date Collected: 11/28/16 14:05

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.3

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	☼	12/02/16 07:34	12/02/16 23:51	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/02/16 07:34	12/02/16 23:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/02/16 07:34	12/02/16 23:51	1
Phenol-d5	96		36 - 123	12/02/16 07:34	12/02/16 23:51	1
Nitrobenzene-d5	78		33 - 124	12/02/16 07:34	12/02/16 23:51	1
2-Fluorobiphenyl	82		42 - 115	12/02/16 07:34	12/02/16 23:51	1
2,4,6-Tribromophenol	44		25 - 130	12/02/16 07:34	12/02/16 23:51	1
Terphenyl-d14	94		25 - 150	12/02/16 07:34	12/02/16 23:51	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	☼	11/29/16 15:07	12/01/16 19:54	1
Arsenic	3.6		0.60	0.28	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Barium	110		0.60	0.11	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Beryllium	0.47		0.24	0.052	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Boron	2.8	J B	3.0	0.42	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Cadmium	0.12		0.12	0.035	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Calcium	8000		12	3.9	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Chromium	14	B	0.60	0.10	mg/Kg	☼	11/29/16 15:07	12/03/16 06:26	1
Cobalt	7.5		0.30	0.068	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Copper	9.6		0.60	0.13	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Iron	14000	B	12	4.7	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Lead	9.3		0.30	0.15	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Magnesium	5000	B	6.0	2.5	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Manganese	250	B	0.60	0.12	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Nickel	14		0.60	0.16	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Potassium	690	B	30	4.9	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Selenium	0.43	J	0.60	0.30	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Sodium	72	B	60	8.0	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Vanadium	18		0.30	0.088	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1
Zinc	43		1.2	0.38	mg/Kg	☼	11/29/16 15:07	12/01/16 19:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.42	J	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 21:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 21:43	1
Boron	0.095	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 21:43	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120663-1

Client Sample ID: 1314V3-25-B07 (6-12)

Lab Sample ID: 500-120663-7

Date Collected: 11/28/16 14:05

Matrix: Solid

Date Received: 11/29/16 09:25

Percent Solids: 80.3

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		12/02/16 14:06	12/03/16 21:43	1
Chromium	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:43	1
Cobalt	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:43	1
Iron	<0.40		0.40	0.20	mg/L		12/02/16 14:06	12/03/16 21:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/02/16 14:06	12/03/16 21:43	1
Manganese	0.67		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:43	1
Nickel	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:43	1
Selenium	<0.050		0.050	0.020	mg/L		12/02/16 14:06	12/03/16 21:43	1
Silver	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 21:43	1
Zinc	<0.50		0.50	0.020	mg/L		12/02/16 14:06	12/03/16 21:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.15		0.025	0.010	mg/L		12/02/16 14:10	12/05/16 21:15	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		12/02/16 14:06	12/05/16 11:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/02/16 14:06	12/05/16 11:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/02/16 10:45	12/05/16 12:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.019	0.010	mg/Kg	☼	11/29/16 14:30	11/30/16 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			11/30/16 13:42	1

Definitions/Glossary

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

TestAmerica Job ID: 500-120663-1

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: 500-120663-1

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 61
Phone: 708.534.5200 Fax: 708.53



500-120663 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 #: 500-120663

Chain of Custody Number: ES46-01

Page _____ of _____

Temperature °C of Cooler: 3.5

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	
I74		50012744										
Project Location/State		Lab PM										
Rock Island County		D-Wright										
Sampler												
S. Cooper												
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix						
			Date	Time								
1		1314V3-25-B03(0-8)	11-28-16	1155	2 S	VUC	X	X	X	X	X	64C08
2		1314V3-25-B04(0-6)	11-28-16	1230	2 S	SUUC	X	X	X	X	X	
3		1314V3-25-B04(6-12)	11-28-16	1235	2 S	TOTAL TANK	X	X	X	X	X	
4		1314V3-25-B06(0-6)	11-28-16	1315	2 S	Metal	X	X	X	X	X	
5		1314V3-25-B06(6-12)	11-28-16	1320	2 S	CWP/SPG	X	X	X	X	X	
6		1314V3-25-B07(0-6)	11-28-16	1400	2 S	TANK METALS	X	X	X	X	X	
7		1314V3-25-B07(6-12)	11-28-16	1405	2 S	PW/Y.S.I.D	X	X	X	X	X	
8		1314V3-25-B01(0-6)	11-28-16	1445	2 S		X	X	X	X	X	
9		1314V3-25-B01(6-12)	11-28-16	1450	2 S		X	X	X	X	X	
10		1314V3-25-B02(0-6)	11-28-16	1535	2 S		X	X	X	X	X	

Turnaround Time Required (Business Days)

Requested Due Date: 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
<i>[Signature]</i>	EE	11-28-16	1730	<i>[Signature]</i>	TA-CWT	11/29/16	0925
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
Shipped: FedEx
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
 A - Air 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 #: 500-120663

Chain of Custody Number: E846-02

Page _____ of _____

Temperature °C of Cooler: _____

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 #		# of Containers		Matrix										Comments	
F 74		50012744															
Project Location/State		Lab PM		Date		Time											
Rock Island County, IL		D. Wright															
Sampler		Sample ID		Date		Time											
S. Cooper																	
Lab ID	MS/MSD	Sample ID		Date		Time		# of Containers	Matrix								
11		1314V3-25-B02 (612)		11/28/16	1640	2	5		UCC	X	X	X	X	X			
12		1314V3-25-B05 (06)		11/28/16	1635	2	5		SUC	X	X	X	X	X			
13		1314V3-25-B05 (612)		11/28/16	1640	2	5		Tot. TAC Ineq	X	X	X	X	X			
									Turbidity TAC TAC	X	X	X	X	X			
									pH/0.50/1.1	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: <u>EE</u> Date: <u>11/28/16</u> Time: <u>1730</u>	Received By: <u>Shirley Smith DA-EMT</u> Company: _____ Date: <u>11/29/16</u> Time: <u>0925</u>	Lab Courier: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Shipped: <u>Fed X</u>
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	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: 500-120663-1

Login Number: 120663

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	3.5
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.	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	





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):

2101 5th Avenue (ISGS #1314V3-26)

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: 41.50947 Longitude: -90.50835
(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: 41.50947 Longitude: -90.50835

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 1314V3-26-B01 and -B02 were sampled within the construction zone adjacent to ISGS #1314V3-26 (Commercial Building). Refer to PSI Report for ISGS #1314V3-26 (Commercial Building) including Table 4-4, and Figures 4-3 and 4-14.

- 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 J120882-5.

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:



3/17/17

Date:

Licensed Professional Engineer or
 Licensed Professional Geologist Signature:



Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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

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

 = Concentration exceeds applicable comparison criteria.

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: 500-120882-5
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 5:08:43 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

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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

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Case Narrative

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

TestAmerica Job ID: 500-120882-5

Job ID: 500-120882-5

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-120882-5

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: 500-120882-5

Client Sample ID: 1314V3-26-B01 (0-8)

Lab Sample ID: 500-120882-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0078	J	0.041	0.0064	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.013	J	0.084	0.0077	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.043		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0070	J	0.041	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.071		0.041	0.0077	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.069		0.041	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.040	J	0.041	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.045		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.091		0.041	0.0090	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.029	J	0.041	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.050		0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.027	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.012	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.020	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.43	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.7		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	110		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	7.2		3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	7700		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.4		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2100		6.0	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.60	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		60	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.70		0.60	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.050		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.058		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-26-B02 (0-8)

Lab Sample ID: 500-120882-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.25	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.5		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	79		0.60	0.11	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: 500-120882-5

Client Sample ID: 1314V3-26-B02 (0-8) (Continued)

Lab Sample ID: 500-120882-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.49		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	2.8	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	6000		12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.30	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	9.3		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	7.0		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3200		6.0	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	880		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	150		60	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.30	0.088	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.26	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.020	J	0.050	0.020	mg/L	1		6010B	TCLP
Mercury	0.013	J	0.020	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: 500-120882-5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120882-12	1314V3-26-B01 (0-8)	Solid	12/01/16 14:05	12/02/16 10:10
500-120882-13	1314V3-26-B02 (0-8)	Solid	12/01/16 14:40	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: 500-120882-5

Client Sample ID: 1314V3-26-B01 (0-8)

Lab Sample ID: 500-120882-12

Date Collected: 12/01/16 14:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.022		0.022	0.0095	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Bromoform	<0.0022		0.0022	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Bromomethane	<0.0054		0.0054	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
2-Butanone (MEK)	<0.0054		0.0054	0.0024	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Chloroethane	<0.0054		0.0054	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,1-Dichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,3-Dichloropropane, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Methylene Chloride	<0.0054		0.0054	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Trichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Vinyl acetate	<0.0054		0.0054	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1
Xylenes, Total	<0.0044		0.0044	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/02/16 16:10	12/06/16 18:15	1
Dibromofluoromethane	99		75 - 120	12/02/16 16:10	12/06/16 18:15	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/02/16 16:10	12/06/16 18:15	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 16:10	12/06/16 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-5

Client Sample ID: 1314V3-26-B01 (0-8)

Lab Sample ID: 500-120882-12

Date Collected: 12/01/16 14:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.1

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	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Naphthalene	0.0078	J	0.041	0.0064	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2-Methylnaphthalene	0.013	J	0.084	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Phenanthrene	0.043		0.041	0.0058	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Anthracene	0.0070	J	0.041	0.0070	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Fluoranthene	0.071		0.041	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Pyrene	0.069		0.041	0.0083	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Benzo[a]anthracene	0.040	J	0.041	0.0056	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-5

Client Sample ID: 1314V3-26-B01 (0-8)

Lab Sample ID: 500-120882-12

Date Collected: 12/01/16 14:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.045		0.041	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Benzo[b]fluoranthene	0.091		0.041	0.0090	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Benzo[k]fluoranthene	0.029 J		0.041	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Benzo[a]pyrene	0.050		0.041	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Indeno[1,2,3-cd]pyrene	0.027 J		0.041	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Dibenz(a,h)anthracene	0.012 J		0.041	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
Benzo[g,h,i]perylene	0.020 J		0.041	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	105		40 - 130	12/10/16 09:29	12/14/16 05:57	1
Phenol-d5	116		36 - 123	12/10/16 09:29	12/14/16 05:57	1
Nitrobenzene-d5	98		33 - 124	12/10/16 09:29	12/14/16 05:57	1
2-Fluorobiphenyl	84		42 - 115	12/10/16 09:29	12/14/16 05:57	1
2,4,6-Tribromophenol	78		25 - 130	12/10/16 09:29	12/14/16 05:57	1
Terphenyl-d14	110		25 - 150	12/10/16 09:29	12/14/16 05:57	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43 J		1.2	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Arsenic	2.7		0.60	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Barium	110		0.60	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Beryllium	0.56		0.24	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Boron	7.2		3.0	0.42	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Cadmium	0.31		0.12	0.034	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Calcium	7700		12	3.8	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Chromium	11 B		0.60	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Cobalt	4.4		0.30	0.067	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Copper	19		0.60	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Iron	14000		12	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Lead	21		0.30	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Magnesium	2100		6.0	2.4	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Manganese	290		0.60	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Nickel	12 B		0.60	0.16	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Potassium	1100		30	4.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Selenium	0.33 J		0.60	0.29	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Sodium	230		60	7.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Thallium	0.70		0.60	0.29	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Vanadium	14		0.30	0.087	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
Zinc	58		1.2	0.38	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	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 14:16	12/07/16 15:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:19	1
Boron	0.099 J		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:19	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-5

Client Sample ID: 1314V3-26-B01 (0-8)

Lab Sample ID: 500-120882-12

Date Collected: 12/01/16 14:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0023	J	0.0050	0.0020	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Manganese	1.1		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:19	1
Zinc	0.18	J B	0.50	0.020	mg/L	-	12/06/16 14:16	12/07/16 15:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.050		0.025	0.010	mg/L	-	12/06/16 14:13	12/07/16 21:18	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 20:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:16	12/07/16 20:06	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	-	12/06/16 13:45	12/07/16 10:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058		0.019	0.010	mg/Kg	☼	12/05/16 14:30	12/06/16 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU	-		12/06/16 15:30	1

Client Sample Results

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

TestAmerica Job ID: 500-120882-5

Client Sample ID: 1314V3-26-B02 (0-8)

Lab Sample ID: 500-120882-13

Date Collected: 12/01/16 14:40

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0088	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Vinyl acetate	<0.0050		0.0050	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1
Xylenes, Total	<0.0040		0.0040	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/02/16 16:10	12/06/16 18:40	1
Dibromofluoromethane	101		75 - 120	12/02/16 16:10	12/06/16 18:40	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/02/16 16:10	12/06/16 18:40	1
Toluene-d8 (Surr)	104		75 - 123	12/02/16 16:10	12/06/16 18:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-5

Client Sample ID: 1314V3-26-B02 (0-8)

Lab Sample ID: 500-120882-13

Date Collected: 12/01/16 14:40

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 82.2

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	☼	12/10/16 09:29	12/14/16 06:22	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-5

Client Sample ID: 1314V3-26-B02 (0-8)

Lab Sample ID: 500-120882-13

Date Collected: 12/01/16 14:40

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 06:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		40 - 130	12/10/16 09:29	12/14/16 06:22	1
Phenol-d5	119		36 - 123	12/10/16 09:29	12/14/16 06:22	1
Nitrobenzene-d5	108		33 - 124	12/10/16 09:29	12/14/16 06:22	1
2-Fluorobiphenyl	95		42 - 115	12/10/16 09:29	12/14/16 06:22	1
2,4,6-Tribromophenol	72		25 - 130	12/10/16 09:29	12/14/16 06:22	1
Terphenyl-d14	113		25 - 150	12/10/16 09:29	12/14/16 06:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.25	J	1.2	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Arsenic	2.5		0.60	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Barium	79		0.60	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Beryllium	0.49		0.24	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Boron	2.8	J	3.0	0.42	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Cadmium	0.22		0.12	0.035	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Calcium	6000		12	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Chromium	13	B	0.60	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Cobalt	5.3		0.30	0.068	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Copper	9.3		0.60	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Iron	14000		12	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Lead	7.0		0.30	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Magnesium	3200		6.0	2.4	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Manganese	360		0.60	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Nickel	12	B	0.60	0.16	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Potassium	880		30	4.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Selenium	<0.60		0.60	0.30	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Sodium	150		60	8.0	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Thallium	0.80		0.60	0.30	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Vanadium	17		0.30	0.088	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
Zinc	32		1.2	0.38	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:23	1
Boron	0.084	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:23	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-5

Client Sample ID: 1314V3-26-B02 (0-8)

Lab Sample ID: 500-120882-13

Date Collected: 12/01/16 14:40

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 82.2

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		12/06/16 14:16	12/07/16 15:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:23	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:23	1
Iron	0.26	J	0.40	0.20	mg/L		12/06/16 14:16	12/07/16 15:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 15:23	1
Manganese	0.031		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:23	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:23	1
Selenium	0.020	J	0.050	0.020	mg/L		12/06/16 14:16	12/07/16 15:23	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:23	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 15:23	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		12/06/16 14:16	12/07/16 20:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 20:09	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		12/06/16 13:45	12/07/16 10:36	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	☼	12/05/16 14:30	12/06/16 14:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/06/16 15:34	1

Definitions/Glossary

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

TestAmerica Job ID: 500-120882-5

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: 500-120882-5

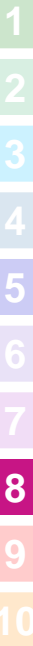
Laboratory: TestAmerica Chicago

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: E946-1B
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter												Preservative Key	
I DOT		1009058-0046-01																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 #																	
ITM		80812744																	
Project Location/State		Lab PM																	
Rock Island County, IL		D Wright																	
Sampler																			
S. Cooper																			
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SIOC	Total PCBs	PCBs	PCB Meth	PCB Meth	1st/2nd Solids	Comments					
			Date	Time															
12		1314 V3-26-B01 (0-8)	12-1-16	1405	2 S		X	X	X	X	X	X							
13		1314 V3-26-B02 (0-6)	12-1-16	1440	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
 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>[Signature]</i>	CE	12-1-16	1730	<i>[Signature]</i>	TA-CHE	12/2/16	1010
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
 Shipped: Fed-X
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Sol 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: 500-120882-5

Login Number: 120882

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	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 <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):

1900 5th Avenue (ISGS #1314V3-32)

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: 41.50775 Longitude: -90.5105
(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: 1610455072 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: 41.50775 Longitude: -90.5105Uncontaminated 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 1314V3-32-B01, -B02, -B03, -B04, -B05, -B06, -B07, and -B08 were sampled within the construction zone adjacent to ISGS #1314V3-32 (Commercial Buildings). Refer to PSI Report for ISGS #1314V3-32 (Commercial Buildings) including Table 4-4, and Figures 4-3, 4-4, 4-14, and 4-16.

- 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 J120882-4 and J121567-1.

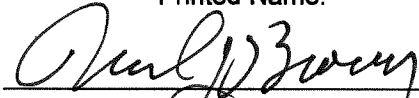
IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

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) 578-9243Neil J. Brown

Printed Name:


3/12/17

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 64C08 - 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.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-32 (Commercial Buildings)				Comparison Criteria					
	1314V3-32-B01		1314V3-32-B02		MACs			TACO		
BORING	1314V3-32-B01		1314V3-32-B02		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-32-B01 (0-6)	1314V3-32-B01 (6-12)	1314V3-32-B02 (0-6)	1314V3-32-B02 (6-12)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	0-6	6-12						
pH	8.9	7.9	7.7	7.6						
VOCs (None Detected)										
SVOCs (mg/kg)										
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	--
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	--
Fluoranthene	0.0087 J	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	--
Phenanthrene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Pyrene	0.0093 J	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.35 J	0.36 J	0.37 J	0.29 J	5	--	--	31	82	--
Arsenic	4.2	6.1	5.2	4.7	11.3	13	--	13	61	--
Barium	56	66	89	61	1,500	--	--	5,500	14,000	--
Beryllium	0.56	0.57	0.63	0.49	22	--	--	160	410	--
Boron	3.7	3.4	3.9	3.6	40	--	--	16,000	41,000	--
Cadmium	0.041 J	ND U	ND U	ND U	5.2	--	--	78	200	--
Calcium	4,500	13,000	5,200	20,000	--	--	--	--	--	--
Chromium	12	15	16	13	21	--	--	230	690	--
Cobalt	5.8	6.4	6.3	4.9	20	--	--	4,700	12,000	--
Copper	11	13	13	10	2,900	--	--	2,900	8,200	--
Iron	13,000	15,000	16,000 †m	13,000	15,000	15,900	--	--	--	--
Lead	12	7.1	11	5.7	107	--	--	400	700	--
Magnesium	2,300	9,000	2,900	13,000	325,000	--	--	--	730,000	--
Manganese	330	360	390	330	630	636	--	1,600	4,100	--
Mercury	0.029	0.02	0.016 J	0.015 J	0.89	--	--	10	0.1	--
Nickel	12	14	15	12	100	--	--	1,600	4,100	--
Potassium	900	800	970	810	--	--	--	--	--	--
Selenium	0.52	0.47 J	0.63	0.31 J	1.3	--	--	390	1,000	--
Sodium	180	440	730	820	--	--	--	--	--	--
Thallium	0.82	1.1	1.1	0.93	2.6	--	--	6.3	160	--
Vanadium	22	25	25	22	550	--	--	550	1400	--
Zinc	64	32	39	28	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.66	0.79	0.52	0.82	--	--	--	--	--	2
Boron	ND U	0.072 J	0.08 J	0.081 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.6 L	0.17 L	0.19 L	0.22 L	--	--	--	--	--	0.15
Nickel	0.013 J	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.033 J	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	0.66 L	0.67 L	0.52 L	0.59 J L	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-32 (Commercial Buildings)				Comparison Criteria					
	1314V3-32-B03		1314V3-32-B04		MACs			TACO		
BORING	1314V3-32-B03 (0-6)		1314V3-32-B04 (6-12)		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-32-B03 (0-6)	1314V3-32-B03 (6-12)	1314V3-32-B04 (0-6)	1314V3-32-B04 (6-12)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	0-6	6-12						
pH	8.8	8.4	8.8	8.1						
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	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.018 J	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.015 J	ND U	0.0087 J	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.018 J	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.011 J	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	0.018 J	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	--
Fluoranthene	0.023 J	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	0.012 J	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Pyrene	0.023 J	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.32 J	0.34 J	0.38 J	0.35 J	5	--	--	31	82	--
Arsenic	2.9	4.2	6.1	6.4	11.3	13	--	13	61	--
Barium	39	45	78	87	1,500	--	--	5,500	14,000	--
Beryllium	0.38	0.4	0.59	0.71	22	--	--	160	410	--
Boron	2.2 J	2.5	2.6	4.2	40	--	--	16,000	41,000	--
Cadmium	ND U	0.09 J	ND U	ND U	5.2	--	--	78	200	--
Calcium	9,500	14,000	16,000	12,000	--	--	--	--	--	--
Chromium	8.7	9.4	16	19	21	--	--	230	690	--
Cobalt	3.8	5.5	6.2	7.8	20	--	--	4,700	12,000	--
Copper	7.5	8.9	13	14	2,900	--	--	2,900	8,200	--
Iron	8,600	11,000	17,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	7.7	5.2	9.4	8.4	107	--	--	400	700	--
Magnesium	3,800	8,800	2,200	8,700	325,000	--	--	--	730,000	--
Manganese	230	360	470	470	630	636	--	1,600	4,100	--
Mercury	0.026	0.019	0.11	0.021	0.89	--	--	10	0.1	--
Nickel	9.1	13	17	20	100	--	--	1,600	4,100	--
Potassium	480	530	970	1,100	--	--	--	--	--	--
Selenium	0.3 J	0.3 J	0.49 J	0.54 J	1.3	--	--	390	1,000	--
Sodium	390	300	900	510	--	--	--	--	--	--
Thallium	0.65	0.8	1.2	1.5	2.6	--	--	6.3	160	--
Vanadium	15	19	26	32	550	--	--	550	1400	--
Zinc	23	23	35	40	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.73	0.55	0.79	0.7	--	--	--	--	--	2
Boron	0.054 J	0.06 J	ND U	0.06 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.4 L	0.27 L	0.2 L	0.15	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.053 J	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	0.31 L	0.37 L	0.5 L	NA	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-32 (Commercial Buildings)				Comparison Criteria					
	1314V3-32-B05	1314V3-32-B06	1314V3-32-B07	1314V3-32-B08	MACs			TACO		
BORING										
SAMPLE	1314V3-32-B05 (0-3)	1314V3-32-B06 (0-3)	1314V3-32-B07 (0-3)	1314V3-32-B08 (0-3)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-3	0-3	0-3	0-3						
pH	8.8	8.8	8.5	8.9						
VOCs (None Detected)										
SVOCs (mg/kg)										
Anthracene	0.013 J	0.046	0.0089 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.096	0.2	0.046	0.028 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.099 †	0.2 †	0.046	0.032 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.14	0.3	0.063	0.047	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.064	0.12	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.033 J	0.11	0.028 J	0.018 J	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	0.49	ND U	46	--	--	46	4,100	--
Chrysene	0.1	0.25	0.041 J	0.028 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.038 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.16	0.51	0.086	0.052	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.01 J	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.052	0.11	0.021 J	0.017 J	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.062	0.23	0.04 J	0.035 J	--	--	--	--	--	--
Pyrene	0.16	0.4	0.072	0.045	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.5 J	0.51 J	0.41 J	0.29 J	5	--	--	31	82	--
Arsenic	3.8	3.9	4.3	3.1	11.3	13	--	13	61	--
Barium	67	99	86	83	1,500	--	--	5,500	14,000	--
Beryllium	0.57	0.62	0.56	0.54	22	--	--	160	410	--
Boron	4.9	6.2	3 J	3.3	40	--	--	16,000	41,000	--
Cadmium	0.12	0.22	0.24	0.18	5.2	--	--	78	200	--
Calcium	42,000	11,000	3,700	7,400	--	--	--	--	--	--
Chromium	13	53 †	15	13	21	--	--	230	690	--
Cobalt	4.2	6.9	5.7	4.3	20	--	--	4,700	12,000	--
Copper	19	14	16	11	2,900	--	--	2,900	8,200	--
Iron	13,000	15,000	14,000	12,000	15,000	15,900	--	--	--	--
Lead	29	190 †	32	18	107	--	--	400	700	--
Magnesium	14,000	2,700	1,800	2,100	325,000	--	--	--	730,000	--
Manganese	320	400	410	250	630	636	--	1,600	4,100	--
Mercury	0.19	0.27 J	0.067	2 †	0.89	--	--	10	0.1	--
Nickel	11	13	12	11	100	--	--	1,600	4,100	--
Potassium	1,200	1,000	910	830	--	--	--	--	--	--
Selenium	0.27 J	0.63	ND U	ND U	1.3	--	--	390	1,000	--
Sodium	530	840	430	520	--	--	--	--	--	--
Thallium	0.98	1.2	0.9	0.67	2.6	--	--	6.3	160	--
Vanadium	19	20	22	19	550	--	--	550	1400	--
Zinc	64	76	46	42	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.67	0.73	0.28 J	0.43 J	--	--	--	--	--	2
Boron	0.062 J	0.081 J	0.078 J	0.071 J	--	--	--	--	--	2
Cadmium	ND U	0.0025 J	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Iron	ND U	ND U	0.39 J	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.67 L	1 L	ND U	0.14	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.036 J	0.065 J	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	ND U	0.53 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: 500-120882-4
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 5:07:58 PM
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Designee for
Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

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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.

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Detection Summary

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B08 (0-3)

Lab Sample ID: 500-120882-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.035	J	0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.052		0.041	0.0076	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.045		0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.028	J	0.041	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.028	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.047		0.041	0.0088	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.041	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.032	J	0.041	0.0079	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.017	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.29	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.1		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	83		0.54	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	3.3		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	7400		11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.54	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.3		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2100		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	830		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Sodium	520		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.67		0.54	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	42		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.071	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.027	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	2.0		0.94	0.49	mg/Kg	50	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B07 (0-3)

Lab Sample ID: 500-120882-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.040	J	0.042	0.0058	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0089	J	0.042	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.086		0.042	0.0078	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.072		0.042	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.046		0.042	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.041	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.49		0.21	0.076	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.063		0.042	0.0090	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.028	J	0.042	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.046		0.042	0.0081	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.042	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: 500-120882-4

Client Sample ID: 1314V3-32-B07 (0-3) (Continued)

Lab Sample ID: 500-120882-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.41	J	1.2	0.26	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.3		0.62	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	86		0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.25	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	3.0	J	3.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.12	0.036	mg/Kg	1	☼	6010B	Total/NA
Calcium	3700		12	4.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.7		0.31	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.62	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	4.8	mg/Kg	1	☼	6010B	Total/NA
Lead	32		0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		6.2	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.62	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	910		31	5.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	430		62	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.62	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.31	0.090	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.078	J	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.39	J	0.40	0.20	mg/L	1		6010B	TCLP
Zinc	0.028	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.067		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		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: 500-120882-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120882-10	1314V3-32-B08 (0-3)	Solid	12/01/16 12:05	12/02/16 10:10
500-120882-11	1314V3-32-B07 (0-3)	Solid	12/01/16 12:20	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: 500-120882-4

Client Sample ID: 1314V3-32-B08 (0-3)

Lab Sample ID: 500-120882-10

Date Collected: 12/01/16 12:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0091	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Chloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Methylene Chloride	<0.0052		0.0052	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	12/02/16 16:10	12/06/16 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/02/16 16:10	12/06/16 17:23	1
Dibromofluoromethane	101		75 - 120	12/02/16 16:10	12/06/16 17:23	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/02/16 16:10	12/06/16 17:23	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 16:10	12/06/16 17:23	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	☼	12/10/16 09:29	12/14/16 05:05	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B08 (0-3)

Lab Sample ID: 500-120882-10

Date Collected: 12/01/16 12:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.7

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	☼	12/10/16 09:29	12/14/16 05:05	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Phenanthrene	0.035	J	0.041	0.0057	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Fluoranthene	0.052		0.041	0.0076	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Pyrene	0.045		0.041	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Benzo[a]anthracene	0.028	J	0.041	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B08 (0-3)

Lab Sample ID: 500-120882-10

Date Collected: 12/01/16 12:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.028	J	0.041	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Benzo[b]fluoranthene	0.047		0.041	0.0088	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Benzo[k]fluoranthene	0.018	J	0.041	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Benzo[a]pyrene	0.032	J	0.041	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Indeno[1,2,3-cd]pyrene	0.017	J	0.041	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		40 - 130	12/10/16 09:29	12/14/16 05:05	1
Phenol-d5	114		36 - 123	12/10/16 09:29	12/14/16 05:05	1
Nitrobenzene-d5	103		33 - 124	12/10/16 09:29	12/14/16 05:05	1
2-Fluorobiphenyl	94		42 - 115	12/10/16 09:29	12/14/16 05:05	1
2,4,6-Tribromophenol	68		25 - 130	12/10/16 09:29	12/14/16 05:05	1
Terphenyl-d14	108		25 - 150	12/10/16 09:29	12/14/16 05:05	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.1	0.22	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Arsenic	3.1		0.54	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Barium	83		0.54	0.098	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Beryllium	0.54		0.21	0.046	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Boron	3.3		2.7	0.37	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Cadmium	0.18		0.11	0.031	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Calcium	7400		11	3.5	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Chromium	13	B	0.54	0.092	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Cobalt	4.3		0.27	0.061	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Copper	11		0.54	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Iron	12000		11	4.1	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Lead	18		0.27	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Magnesium	2100		5.4	2.2	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Manganese	250		0.54	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Nickel	11	B	0.54	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Potassium	830		27	4.4	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Selenium	<0.54		0.54	0.27	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Sodium	520		54	7.1	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Thallium	0.67		0.54	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Vanadium	19		0.27	0.078	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
Zinc	42		1.1	0.34	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	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		12/06/16 14:16	12/07/16 15:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:01	1
Boron	0.071	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:01	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B08 (0-3)

Lab Sample ID: 500-120882-10

Date Collected: 12/01/16 12:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:16	12/07/16 15:01	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:01	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:01	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 15:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 15:01	1
Manganese	0.14		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:01	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:01	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 15:01	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:01	1
Zinc	0.027	J B	0.50	0.020	mg/L		12/06/16 14:16	12/07/16 15:01	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 19:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 19:59	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 10:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.0		0.94	0.49	mg/Kg	☼	12/05/16 14:30	12/06/16 15:46	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			12/06/16 15:23	1

Client Sample Results

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B07 (0-3)

Lab Sample ID: 500-120882-11

Date Collected: 12/01/16 12:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/02/16 16:10	12/06/16 17:49	1
Dibromofluoromethane	99		75 - 120	12/02/16 16:10	12/06/16 17:49	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/02/16 16:10	12/06/16 17:49	1
Toluene-d8 (Surr)	104		75 - 123	12/02/16 16:10	12/06/16 17:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B07 (0-3)

Lab Sample ID: 500-120882-11

Date Collected: 12/01/16 12:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 78.5

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	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Naphthalene	<0.042		0.042	0.0064	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,4-Dichlorophenol	<0.42		0.42	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,4,5-Trichlorophenol	<0.42		0.42	0.095	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,4-Dinitrophenol	<0.84		0.84	0.74	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
4-Nitroaniline	<0.42		0.42	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Phenanthrene	0.040	J	0.042	0.0058	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Anthracene	0.0089	J	0.042	0.0070	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Fluoranthene	0.086		0.042	0.0078	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Pyrene	0.072		0.042	0.0083	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Benzo[a]anthracene	0.046		0.042	0.0056	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B07 (0-3)

Lab Sample ID: 500-120882-11

Date Collected: 12/01/16 12:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.041	J	0.042	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Bis(2-ethylhexyl) phthalate	0.49		0.21	0.076	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Benzo[b]fluoranthene	0.063		0.042	0.0090	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Benzo[k]fluoranthene	0.028	J	0.042	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Benzo[a]pyrene	0.046		0.042	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Indeno[1,2,3-cd]pyrene	0.021	J	0.042	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Benzo[g,h,i]perylene	<0.042		0.042	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	87		40 - 130				12/10/16 09:29	12/14/16 05:31	1
Phenol-d5	92		36 - 123				12/10/16 09:29	12/14/16 05:31	1
Nitrobenzene-d5	84		33 - 124				12/10/16 09:29	12/14/16 05:31	1
2-Fluorobiphenyl	78		42 - 115				12/10/16 09:29	12/14/16 05:31	1
2,4,6-Tribromophenol	41		25 - 130				12/10/16 09:29	12/14/16 05:31	1
Terphenyl-d14	90		25 - 150				12/10/16 09:29	12/14/16 05:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41	J	1.2	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Arsenic	4.3		0.62	0.29	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Barium	86		0.62	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Beryllium	0.56		0.25	0.053	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Boron	3.0	J	3.1	0.43	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Cadmium	0.24		0.12	0.036	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Calcium	3700		12	4.0	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Chromium	15	B	0.62	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Cobalt	5.7		0.31	0.070	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Copper	16		0.62	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Iron	14000		12	4.8	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Lead	32		0.31	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Magnesium	1800		6.2	2.5	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Manganese	410		0.62	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Nickel	12	B	0.62	0.17	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Potassium	910		31	5.0	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Selenium	<0.62		0.62	0.31	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Silver	<0.31		0.31	0.072	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Sodium	430		62	8.2	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Thallium	0.90		0.62	0.30	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Vanadium	22		0.31	0.090	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
Zinc	46		1.2	0.39	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.28	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:14	1
Boron	0.078	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:14	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-120882-4

Client Sample ID: 1314V3-32-B07 (0-3)

Lab Sample ID: 500-120882-11

Date Collected: 12/01/16 12:20

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 78.5

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		12/06/16 14:16	12/07/16 15:14	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:14	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:14	1
Iron	0.39	J	0.40	0.20	mg/L		12/06/16 14:16	12/07/16 15:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 15:14	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:14	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:14	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 15:14	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:14	1
Zinc	0.028	J B	0.50	0.020	mg/L		12/06/16 14:16	12/07/16 15:14	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		12/06/16 14:16	12/07/16 20:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 20:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.067		0.019	0.010	mg/Kg	☼	12/05/16 14:30	12/06/16 14:35	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 15:27	1

Definitions/Glossary

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

TestAmerica Job ID: 500-120882-4

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: 500-120882-4

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: EQ46-14
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments			
EE		1009008-0046-01								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 ITH		Lab Project # 50012744											
Project Location/State Rock Island County, IL		Lab PM D. Wright											
Sampler S. Coupe													
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	SEM TAC	MML	TUP/SP-P TAC MCL	pH / % Sol.	Comments
			Date	Time									
10		1314V7-32-B308(0-3)	12-16	12:05	2	S	X	X	X	X	X		64608
11		1314V3-32-B307(0-3)	12-16	12:20	2	S	X	X	X	X	X		
12-16													

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 <u>SC</u>	Company <u>VE</u>	Date <u>12-7-16</u>	Time <u>1730</u>	Received By <u>Andrew Scott</u>	Company <u>TA-CHE</u>	Date <u>12/2/16</u>	Time <u>1010</u>	Lab Courier
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped <u>FedEx</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	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: 500-120882-4

Login Number: 120882

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	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 <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	



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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: 500-121567-1
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:
12/29/2016 3:06:05 PM

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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Case Narrative

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

TestAmerica Job ID: 500-121567-1

Job ID: 500-121567-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-121567-1**

Comments

No additional comments.

Receipt

The samples were received on 12/16/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° 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 laboratory control sample (LCS) for preparation batch 500-366823 and analytical batch 500-366915 recovered outside control limits for the following analytes: 4-Nitroaniline and Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The following sample contained one acid surrogate outside acceptance limits: (LCS 500-366823/2-A). 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.

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: 500-121567-1

Client Sample ID: 1314V3-32-B06 (0-3)

Lab Sample ID: 500-121567-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluorene	0.010	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.23		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.046		0.040	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.51		0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.40		0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.20		0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.25		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.30		0.040	0.0087	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.11		0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.20		0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.11		0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.038	J	0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.51	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.9		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	99		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	6.2		3.0	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	11000		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	53	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.9		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	190		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2700		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	400		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1000		30	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	840		59	7.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	76		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.081	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.065	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.53		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.27	F1	0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B05 (0-3)

Lab Sample ID: 500-121567-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.062		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.013	J	0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.16		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.16		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: 500-121567-1

Client Sample ID: 1314V3-32-B05 (0-3) (Continued)

Lab Sample ID: 500-121567-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.096		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.10		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.14		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.033	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.099		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.052		0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.064		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.50	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.8		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	67		0.54	0.099	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.22	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	4.9		2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	42000		11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.54	0.093	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.2		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	29		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.27	J	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	530		54	7.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.98		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.079	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.062	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.67		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.036	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.19		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B04 (0-6)

Lab Sample ID: 500-121567-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.0087	J	0.040	0.0086	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.38	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.1		0.51	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	78		0.51	0.093	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6		2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Calcium	16000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	16	B	0.51	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.2		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	9.4		0.25	0.13	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: 500-121567-1

Client Sample ID: 1314V3-32-B04 (0-6) (Continued)

Lab Sample ID: 500-121567-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	2200		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	470		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	970		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.49	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	900		51	6.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	35		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.79		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.50		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.11		0.018	0.0092	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B04 (6-12)

Lab Sample ID: 500-121567-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.35	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.4		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	87		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	4.2		2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Calcium	12000		12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	19	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.8		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	8.4		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8700		5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	470		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	510		58	7.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.5		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	32		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA
Zinc	40		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.060	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.15		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.021		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B01 (0-6)

Lab Sample ID: 500-121567-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.0087	J	0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0093	J	0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.35	J	0.98	0.20	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: 500-121567-1

Client Sample ID: 1314V3-32-B01 (0-6) (Continued)

Lab Sample ID: 500-121567-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.2		0.49	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.49	0.090	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7		2.5	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.041	J	0.098	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	4500		9.8	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.49	0.084	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8		0.25	0.055	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.49	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		9.8	3.8	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2300		4.9	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.49	0.097	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.49	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	900		25	4.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52		0.49	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		49	6.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.82		0.49	0.24	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.25	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		0.98	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.60		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.033	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.66		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.017	0.0087	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B01 (6-12)

Lab Sample ID: 500-121567-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.36	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.1		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	66		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	3.4		2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Calcium	13000		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.4		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	7.1		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9000		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	800		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	440		59	7.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.29	0.086	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: 500-121567-1

Client Sample ID: 1314V3-32-B01 (6-12) (Continued)

Lab Sample ID: 500-121567-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	32		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.79		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
Manganese	0.67		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B03 (0-6)

Lab Sample ID: 500-121567-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.023	J	0.035	0.0065	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.012	J	0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J	0.035	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.015	J	0.035	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.011	J	0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.018	J	0.035	0.0068	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.035	0.0091	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.018	J	0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.32	J	0.94	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.9		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.47	0.086	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA
Boron	2.2	J	2.4	0.33	mg/Kg	1	☼	6010B	Total/NA
Calcium	9500		9.4	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.7	B	0.47	0.081	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.8		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Copper	7.5		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	8600		9.4	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	7.7		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3800		4.7	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.47	0.093	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.1		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	480		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	390		47	6.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.65		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.24	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	23		0.94	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.054	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.053	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.31		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		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: 1314V3-32-B03 (6-12)

Lab Sample ID: 500-121567-8

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: 500-121567-1

Client Sample ID: 1314V3-32-B03 (6-12) (Continued)

Lab Sample ID: 500-121567-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.34	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.2		0.51	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.51	0.093	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5		2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J	0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.4	B	0.51	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Copper	8.9		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	5.2		0.25	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8800		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	530		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	300		51	6.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	23		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.060	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.37		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		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: 1314V3-32-B02 (0-6)

Lab Sample ID: 500-121567-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.37	J	1.2	0.26	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.2		0.62	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	89		0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.63		0.25	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	3.9		3.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Calcium	5200		12	4.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	16	B	0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.3		0.31	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.62	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		12	4.8	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2900		6.2	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.62	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	970		31	5.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Sodium	730		62	8.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.62	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.31	0.090	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: 500-121567-1

Client Sample ID: 1314V3-32-B02 (0-6) (Continued)

Lab Sample ID: 500-121567-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	39		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.52		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.080	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.19		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.52		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-32-B02 (6-12)

Lab Sample ID: 500-121567-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.29	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.7		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.53	0.096	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	3.6		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Calcium	20000		11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.9		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	5.7		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	810		26	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	820		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.93		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.82		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.081	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.59	F1	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		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: 500-121567-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121567-1	1314V3-32-B06 (0-3)	Solid	12/15/16 13:25	12/16/16 09:40
500-121567-2	1314V3-32-B05 (0-3)	Solid	12/15/16 13:40	12/16/16 09:40
500-121567-3	1314V3-32-B04 (0-6)	Solid	12/15/16 14:10	12/16/16 09:40
500-121567-4	1314V3-32-B04 (6-12)	Solid	12/15/16 14:15	12/16/16 09:40
500-121567-5	1314V3-32-B01 (0-6)	Solid	12/15/16 14:35	12/16/16 09:40
500-121567-6	1314V3-32-B01 (6-12)	Solid	12/15/16 14:40	12/16/16 09:40
500-121567-7	1314V3-32-B03 (0-6)	Solid	12/15/16 15:10	12/16/16 09:40
500-121567-8	1314V3-32-B03 (6-12)	Solid	12/15/16 15:15	12/16/16 09:40
500-121567-9	1314V3-32-B02 (0-6)	Solid	12/15/16 15:55	12/16/16 09:40
500-121567-10	1314V3-32-B02 (6-12)	Solid	12/15/16 16:00	12/16/16 09:40



Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B06 (0-3)

Lab Sample ID: 500-121567-1

Date Collected: 12/15/16 13:25

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

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	☼	12/16/16 14:45	12/20/16 19:07	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/16/16 14:45	12/20/16 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/16/16 14:45	12/20/16 19:07	1
Dibromofluoromethane	110		75 - 120	12/16/16 14:45	12/20/16 19:07	1
1,2-Dichloroethane-d4 (Surr)	111		69 - 134	12/16/16 14:45	12/20/16 19:07	1
Toluene-d8 (Surr)	110		75 - 123	12/16/16 14:45	12/20/16 19:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B06 (0-3)

Lab Sample ID: 500-121567-1

Date Collected: 12/15/16 13:25

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,4-Dinitrophenol	<0.81	F1	0.81	0.71	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
4-Nitrophenol	<0.81	F2	0.81	0.38	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Fluorene	0.010	J	0.040	0.0056	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
4-Nitroaniline	<0.40	* F1	0.40	0.17	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Pentachlorophenol	<0.81	F2	0.81	0.64	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Phenanthrene	0.23		0.040	0.0056	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Anthracene	0.046		0.040	0.0067	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Carbazole	<0.20	*	0.20	0.10	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Fluoranthene	0.51		0.040	0.0074	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Pyrene	0.40		0.040	0.0080	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Benzo[a]anthracene	0.20		0.040	0.0054	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B06 (0-3)

Lab Sample ID: 500-121567-1

Date Collected: 12/15/16 13:25

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.25		0.040	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Benzo[b]fluoranthene	0.30		0.040	0.0087	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Benzo[k]fluoranthene	0.11		0.040	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Benzo[a]pyrene	0.20		0.040	0.0078	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Indeno[1,2,3-cd]pyrene	0.11		0.040	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Dibenz(a,h)anthracene	0.038	J	0.040	0.0078	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Benzo[g,h,i]perylene	0.12		0.040	0.013	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/28/16 07:19	12/28/16 23:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		40 - 130				12/28/16 07:19	12/28/16 23:29	1
Phenol-d5	57		36 - 123				12/28/16 07:19	12/28/16 23:29	1
Nitrobenzene-d5	72		33 - 124				12/28/16 07:19	12/28/16 23:29	1
2-Fluorobiphenyl	76		42 - 115				12/28/16 07:19	12/28/16 23:29	1
2,4,6-Tribromophenol	75		25 - 130				12/28/16 07:19	12/28/16 23:29	1
Terphenyl-d14	101		25 - 150				12/28/16 07:19	12/28/16 23:29	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.2	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Arsenic	3.9		0.59	0.27	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Barium	99		0.59	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Beryllium	0.62		0.24	0.051	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Boron	6.2		3.0	0.41	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Cadmium	0.22		0.12	0.034	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Calcium	11000		12	3.8	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Chromium	53	B	0.59	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Cobalt	6.9		0.30	0.067	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Copper	14		0.59	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Iron	15000		12	4.6	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Lead	190		0.30	0.15	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Magnesium	2700		5.9	2.4	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Manganese	400		0.59	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Nickel	13		0.59	0.16	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Potassium	1000		30	4.8	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Selenium	0.63		0.59	0.29	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Silver	<0.30		0.30	0.069	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Sodium	840		59	7.8	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Thallium	1.2		0.59	0.29	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Vanadium	20		0.30	0.087	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1
Zinc	76		1.2	0.38	mg/Kg	☼	12/21/16 08:13	12/24/16 00:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 12:35	1
Boron	0.081	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:35	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B06 (0-3)

Lab Sample ID: 500-121567-1

Date Collected: 12/15/16 13:25

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

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	-	12/27/16 08:29	12/28/16 12:35	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Iron	<0.40		0.40	0.20	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Manganese	1.0		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Silver	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 12:35	1
Zinc	0.065	J	0.50	0.020	mg/L	-	12/27/16 08:29	12/28/16 12:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.53		0.025	0.010	mg/L	-	12/27/16 08:26	12/28/16 05:41	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	-	12/27/16 08:29	12/27/16 22:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/27/16 08:29	12/27/16 22:51	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	-	12/27/16 11:30	12/28/16 09:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27	F1	0.020	0.011	mg/Kg	☼	12/21/16 14:45	12/22/16 10:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU	-		12/27/16 12:32	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B05 (0-3)

Lab Sample ID: 500-121567-2

Date Collected: 12/15/16 13:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.1

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	☼	12/16/16 14:45	12/20/16 19:32	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/16/16 14:45	12/20/16 19:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/16/16 14:45	12/20/16 19:32	1
Dibromofluoromethane	110		75 - 120	12/16/16 14:45	12/20/16 19:32	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/16/16 14:45	12/20/16 19:32	1
Toluene-d8 (Surr)	110		75 - 123	12/16/16 14:45	12/20/16 19:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B05 (0-3)

Lab Sample ID: 500-121567-2

Date Collected: 12/15/16 13:40

Matrix: Solid

Date Received: 12/16/16 09:40

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	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
4-Nitroaniline	<0.38 *		0.38	0.16	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Phenanthrene	0.062		0.038	0.0053	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Anthracene	0.013 J		0.038	0.0063	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Carbazole	<0.19 *		0.19	0.095	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Fluoranthene	0.16		0.038	0.0070	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Pyrene	0.16		0.038	0.0075	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Benzo[a]anthracene	0.096		0.038	0.0051	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B05 (0-3)

Lab Sample ID: 500-121567-2

Date Collected: 12/15/16 13:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.10		0.038	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Benzo[b]fluoranthene	0.14		0.038	0.0082	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Benzo[k]fluoranthene	0.033	J	0.038	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Benzo[a]pyrene	0.099		0.038	0.0074	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Indeno[1,2,3-cd]pyrene	0.052		0.038	0.0098	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
Benzo[g,h,i]perylene	0.064		0.038	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/28/16 07:19	12/28/16 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		40 - 130	12/28/16 07:19	12/28/16 23:04	1
Phenol-d5	67		36 - 123	12/28/16 07:19	12/28/16 23:04	1
Nitrobenzene-d5	77		33 - 124	12/28/16 07:19	12/28/16 23:04	1
2-Fluorobiphenyl	79		42 - 115	12/28/16 07:19	12/28/16 23:04	1
2,4,6-Tribromophenol	55		25 - 130	12/28/16 07:19	12/28/16 23:04	1
Terphenyl-d14	109		25 - 150	12/28/16 07:19	12/28/16 23:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.50	J	1.1	0.22	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Arsenic	3.8		0.54	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Barium	67		0.54	0.099	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Beryllium	0.57		0.22	0.047	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Boron	4.9		2.7	0.38	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Cadmium	0.12		0.11	0.031	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Calcium	42000		11	3.5	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Chromium	13	B	0.54	0.093	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Cobalt	4.2		0.27	0.061	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Copper	19		0.54	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Iron	13000		11	4.2	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Lead	29		0.27	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Magnesium	14000		5.4	2.2	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Manganese	320		0.54	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Nickel	11		0.54	0.15	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Potassium	1200		27	4.4	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Selenium	0.27	J	0.54	0.27	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Sodium	530		54	7.2	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Thallium	0.98		0.54	0.27	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Vanadium	19		0.27	0.079	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	1
Zinc	64		1.1	0.34	mg/Kg	☼	12/21/16 08:13	12/24/16 00:37	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		12/27/16 08:29	12/28/16 12:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 12:40	1
Boron	0.062	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:40	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B05 (0-3)

Lab Sample ID: 500-121567-2

Date Collected: 12/15/16 13:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.1

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		12/27/16 08:29	12/28/16 12:40	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:40	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:40	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 12:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 12:40	1
Manganese	0.67		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:40	1
Nickel	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:40	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 12:40	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:40	1
Zinc	0.036	J	0.50	0.020	mg/L		12/27/16 08:29	12/28/16 12:40	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		12/27/16 08:26	12/28/16 05:48	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		12/27/16 08:29	12/27/16 22:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 22:54	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		12/27/16 11:30	12/28/16 09:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.017	0.0090	mg/Kg	☼	12/21/16 14:45	12/22/16 11:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/27/16 12:40	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (0-6)

Lab Sample ID: 500-121567-3

Date Collected: 12/15/16 14:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.7

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	☼	12/16/16 14:45	12/20/16 19:58	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	12/16/16 14:45	12/20/16 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/16/16 14:45	12/20/16 19:58	1
Dibromofluoromethane	111		75 - 120	12/16/16 14:45	12/20/16 19:58	1
1,2-Dichloroethane-d4 (Surr)	111		69 - 134	12/16/16 14:45	12/20/16 19:58	1
Toluene-d8 (Surr)	107		75 - 123	12/16/16 14:45	12/20/16 19:58	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	☼	12/28/16 07:19	12/28/16 19:44	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (0-6)

Lab Sample ID: 500-121567-3

Date Collected: 12/15/16 14:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.7

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	☼	12/28/16 07:19	12/28/16 19:44	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
4-Nitroaniline	<0.40 *		0.40	0.17	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Carbazole	<0.20 *		0.20	0.10	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (0-6)

Lab Sample ID: 500-121567-3

Date Collected: 12/15/16 14:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.7

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	☼	12/28/16 07:19	12/28/16 19:44	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Benzo[b]fluoranthene	0.0087	J	0.040	0.0086	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/28/16 07:19	12/28/16 19:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		40 - 130	12/28/16 07:19	12/28/16 19:44	1
Phenol-d5	75		36 - 123	12/28/16 07:19	12/28/16 19:44	1
Nitrobenzene-d5	73		33 - 124	12/28/16 07:19	12/28/16 19:44	1
2-Fluorobiphenyl	77		42 - 115	12/28/16 07:19	12/28/16 19:44	1
2,4,6-Tribromophenol	85		25 - 130	12/28/16 07:19	12/28/16 19:44	1
Terphenyl-d14	105		25 - 150	12/28/16 07:19	12/28/16 19:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.0	0.21	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Arsenic	6.1		0.51	0.23	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Barium	78		0.51	0.093	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Beryllium	0.59		0.20	0.044	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Boron	2.6		2.5	0.35	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Cadmium	<0.10		0.10	0.029	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Calcium	16000		10	3.3	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Chromium	16	B	0.51	0.087	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Cobalt	6.2		0.25	0.057	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Copper	13		0.51	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Iron	17000		10	3.9	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Lead	9.4		0.25	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Magnesium	2200		5.1	2.1	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Manganese	470		0.51	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Nickel	17		0.51	0.14	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Potassium	970		25	4.1	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Selenium	0.49	J	0.51	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Sodium	900		51	6.7	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Thallium	1.2		0.51	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Vanadium	26		0.25	0.074	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1
Zinc	35		1.0	0.32	mg/Kg	☼	12/21/16 08:13	12/24/16 00:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.79		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 12:45	1
Boron	<0.50		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:45	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (0-6)

Lab Sample ID: 500-121567-3

Date Collected: 12/15/16 14:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/27/16 08:29	12/28/16 12:45	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:45	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:45	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 12:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 12:45	1
Manganese	0.20		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:45	1
Nickel	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:45	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 12:45	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:45	1
Zinc	<0.50		0.50	0.020	mg/L		12/27/16 08:29	12/28/16 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.50		0.025	0.010	mg/L		12/27/16 08:26	12/28/16 06:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/27/16 08:29	12/27/16 22:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 22:57	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		12/27/16 11:30	12/28/16 09:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.018	0.0092	mg/Kg	☼	12/21/16 14:45	12/22/16 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/27/16 12:49	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (6-12)

Lab Sample ID: 500-121567-4

Date Collected: 12/15/16 14:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	12/16/16 14:45	12/20/16 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/16/16 14:45	12/20/16 20:23	1
Dibromofluoromethane	108		75 - 120	12/16/16 14:45	12/20/16 20:23	1
1,2-Dichloroethane-d4 (Surr)	114		69 - 134	12/16/16 14:45	12/20/16 20:23	1
Toluene-d8 (Surr)	107		75 - 123	12/16/16 14:45	12/20/16 20:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.22		0.22	0.096	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
1,3-Dichlorobenzene	<0.22		0.22	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
1,4-Dichlorobenzene	<0.22		0.22	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (6-12)

Lab Sample ID: 500-121567-4

Date Collected: 12/15/16 14:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.22		0.22	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
N-Nitrosodi-n-propylamine	<0.087		0.087	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Hexachloroethane	<0.22		0.22	0.065	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2-Chlorophenol	<0.22		0.22	0.073	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
1,2,4-Trichlorobenzene	<0.22		0.22	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Isophorone	<0.22		0.22	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Naphthalene	<0.043		0.043	0.0066	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
4-Chloroaniline	<0.87		0.87	0.20	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,4,5-Trichlorophenol	<0.43		0.43	0.098	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Hexachlorocyclopentadiene	<0.87		0.87	0.25	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2-Methylnaphthalene	<0.087		0.087	0.0079	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,6-Dinitrotoluene	<0.22		0.22	0.085	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Dimethyl phthalate	<0.22		0.22	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,4-Dinitrophenol	<0.87		0.87	0.76	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Acenaphthylene	<0.043		0.043	0.0057	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
2,4-Dinitrotoluene	<0.22		0.22	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Acenaphthene	<0.043		0.043	0.0077	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Dibenzofuran	<0.22		0.22	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
4-Nitrophenol	<0.87		0.87	0.41	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Fluorene	<0.043		0.043	0.0060	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
4-Nitroaniline	<0.43 *		0.43	0.18	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Hexachlorobenzene	<0.087		0.087	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Pentachlorophenol	<0.87		0.87	0.69	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
4,6-Dinitro-2-methylphenol	<0.87		0.87	0.35	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Phenanthrene	<0.043		0.043	0.0060	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Anthracene	<0.043		0.043	0.0072	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Carbazole	<0.22 *		0.22	0.11	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Fluoranthene	<0.043		0.043	0.0080	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Pyrene	<0.043		0.043	0.0085	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Benzo[a]anthracene	<0.043		0.043	0.0058	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (6-12)

Lab Sample ID: 500-121567-4

Date Collected: 12/15/16 14:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.043		0.043	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.079	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Di-n-octyl phthalate	<0.22		0.22	0.070	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Benzo[b]fluoranthene	<0.043		0.043	0.0093	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Benzo[a]pyrene	<0.043		0.043	0.0083	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Indeno[1,2,3-cd]pyrene	<0.043		0.043	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0083	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1
3 & 4 Methylphenol	<0.22		0.22	0.072	mg/Kg	☼	12/28/16 07:19	12/28/16 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	82		40 - 130	12/28/16 07:19	12/28/16 20:09	1
Phenol-d5	68		36 - 123	12/28/16 07:19	12/28/16 20:09	1
Nitrobenzene-d5	74		33 - 124	12/28/16 07:19	12/28/16 20:09	1
2-Fluorobiphenyl	76		42 - 115	12/28/16 07:19	12/28/16 20:09	1
2,4,6-Tribromophenol	108		25 - 130	12/28/16 07:19	12/28/16 20:09	1
Terphenyl-d14	104		25 - 150	12/28/16 07:19	12/28/16 20:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.2	0.24	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Arsenic	6.4		0.58	0.27	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Barium	87		0.58	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Beryllium	0.71		0.23	0.050	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Boron	4.2		2.9	0.41	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Cadmium	<0.12		0.12	0.034	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Calcium	12000		12	3.7	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Chromium	19	B	0.58	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Cobalt	7.8		0.29	0.066	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Copper	14		0.58	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Iron	19000		12	4.5	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Lead	8.4		0.29	0.14	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Magnesium	8700		5.8	2.4	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Manganese	470		0.58	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Nickel	20		0.58	0.16	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Potassium	1100		29	4.8	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Selenium	0.54	J	0.58	0.29	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Sodium	510		58	7.7	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Thallium	1.5		0.58	0.29	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Vanadium	32		0.29	0.085	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1
Zinc	40		1.2	0.37	mg/Kg	☼	12/21/16 08:13	12/24/16 00:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 12:49	1
Boron	0.060	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B04 (6-12)

Lab Sample ID: 500-121567-4

Date Collected: 12/15/16 14:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 77.1

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		12/27/16 08:29	12/28/16 12:49	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:49	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:49	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 12:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 12:49	1
Manganese	0.15		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:49	1
Nickel	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:49	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 12:49	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:49	1
Zinc	<0.50		0.50	0.020	mg/L		12/27/16 08:29	12/28/16 12:49	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		12/27/16 08:29	12/27/16 23:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 23:01	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		12/27/16 11:30	12/28/16 09:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.020	0.011	mg/Kg	✱	12/21/16 14:45	12/22/16 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/27/16 12:57	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (0-6)

Lab Sample ID: 500-121567-5

Date Collected: 12/15/16 14:35

Matrix: Solid

Date Received: 12/16/16 09:40

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	☼	12/16/16 14:45	12/21/16 15:21	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 15:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/16/16 14:45	12/21/16 15:21	1
Dibromofluoromethane	108		75 - 120	12/16/16 14:45	12/21/16 15:21	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/16/16 14:45	12/21/16 15:21	1
Toluene-d8 (Surr)	109		75 - 123	12/16/16 14:45	12/21/16 15:21	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	☼	12/28/16 07:19	12/28/16 22:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (0-6)

Lab Sample ID: 500-121567-5

Date Collected: 12/15/16 14:35

Matrix: Solid

Date Received: 12/16/16 09:40

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	☼	12/28/16 07:19	12/28/16 22:15	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
4-Nitroaniline	<0.36 *		0.36	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Carbazole	<0.18 *		0.18	0.090	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Fluoranthene	0.0087	J	0.036	0.0067	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Pyrene	0.0093	J	0.036	0.0072	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (0-6)

Lab Sample ID: 500-121567-5

Date Collected: 12/15/16 14:35

Matrix: Solid

Date Received: 12/16/16 09:40

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	☼	12/28/16 07:19	12/28/16 22:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		40 - 130	12/28/16 07:19	12/28/16 22:15	1
Phenol-d5	52		36 - 123	12/28/16 07:19	12/28/16 22:15	1
Nitrobenzene-d5	68		33 - 124	12/28/16 07:19	12/28/16 22:15	1
2-Fluorobiphenyl	73		42 - 115	12/28/16 07:19	12/28/16 22:15	1
2,4,6-Tribromophenol	76		25 - 130	12/28/16 07:19	12/28/16 22:15	1
Terphenyl-d14	100		25 - 150	12/28/16 07:19	12/28/16 22:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	0.98	0.20	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Arsenic	4.2		0.49	0.23	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Barium	56		0.49	0.090	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Beryllium	0.56		0.20	0.043	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Boron	3.7		2.5	0.34	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Cadmium	0.041	J	0.098	0.028	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Calcium	4500		9.8	3.2	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Chromium	12	B	0.49	0.084	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Cobalt	5.8		0.25	0.055	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Copper	11		0.49	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Iron	13000		9.8	3.8	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Lead	12		0.25	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Magnesium	2300		4.9	2.0	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Manganese	330		0.49	0.097	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Nickel	12		0.49	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Potassium	900		25	4.0	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Selenium	0.52		0.49	0.24	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Silver	<0.25		0.25	0.057	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Sodium	180		49	6.5	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Thallium	0.82		0.49	0.24	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Vanadium	22		0.25	0.072	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	1
Zinc	64		0.98	0.31	mg/Kg	☼	12/21/16 08:13	12/24/16 00:58	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		12/27/16 08:29	12/28/16 12:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 12:54	1
Boron	<0.50		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:54	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (0-6)

Lab Sample ID: 500-121567-5

Date Collected: 12/15/16 14:35

Matrix: Solid

Date Received: 12/16/16 09:40

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		12/27/16 08:29	12/28/16 12:54	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:54	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:54	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 12:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 12:54	1
Manganese	0.60		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:54	1
Nickel	0.013	J	0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:54	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 12:54	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:54	1
Zinc	0.033	J	0.50	0.020	mg/L		12/27/16 08:29	12/28/16 12:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.66		0.025	0.010	mg/L		12/27/16 08:26	12/28/16 06:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/27/16 08:29	12/27/16 23:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 23:04	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		12/27/16 11:30	12/28/16 09:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.017	0.0087	mg/Kg	☼	12/21/16 14:45	12/22/16 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			12/27/16 13:06	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (6-12)

Lab Sample ID: 500-121567-6

Date Collected: 12/15/16 14:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.9

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	☼	12/16/16 14:45	12/22/16 17:46	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/16/16 14:45	12/22/16 17:46	1
Dibromofluoromethane	110		75 - 120	12/16/16 14:45	12/22/16 17:46	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/16/16 14:45	12/22/16 17:46	1
Toluene-d8 (Surr)	106		75 - 123	12/16/16 14:45	12/22/16 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (6-12)

Lab Sample ID: 500-121567-6

Date Collected: 12/15/16 14:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
4-Nitroaniline	<0.42 *		0.42	0.18	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Phenanthrene	<0.042		0.042	0.0058	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Carbazole	<0.21 *		0.21	0.10	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Pyrene	<0.042		0.042	0.0083	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Benzo[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (6-12)

Lab Sample ID: 500-121567-6

Date Collected: 12/15/16 14:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/28/16 07:19	12/28/16 20:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		40 - 130	12/28/16 07:19	12/28/16 20:34	1
Phenol-d5	56		36 - 123	12/28/16 07:19	12/28/16 20:34	1
Nitrobenzene-d5	71		33 - 124	12/28/16 07:19	12/28/16 20:34	1
2-Fluorobiphenyl	73		42 - 115	12/28/16 07:19	12/28/16 20:34	1
2,4,6-Tribromophenol	100		25 - 130	12/28/16 07:19	12/28/16 20:34	1
Terphenyl-d14	103		25 - 150	12/28/16 07:19	12/28/16 20:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.2	0.24	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Arsenic	6.1		0.59	0.27	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Barium	66		0.59	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Beryllium	0.57		0.24	0.051	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Boron	3.4		2.9	0.41	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Cadmium	<0.12		0.12	0.034	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Calcium	13000		12	3.8	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Chromium	15	B	0.59	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Cobalt	6.4		0.29	0.067	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Copper	13		0.59	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Iron	15000		12	4.5	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Lead	7.1		0.29	0.15	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Magnesium	9000		5.9	2.4	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Manganese	360		0.59	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Nickel	14		0.59	0.16	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Potassium	800		29	4.8	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Selenium	0.47	J	0.59	0.29	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Silver	<0.29		0.29	0.069	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Sodium	440		59	7.8	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Thallium	1.1		0.59	0.29	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Vanadium	25		0.29	0.086	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1
Zinc	32		1.2	0.37	mg/Kg	☼	12/21/16 08:13	12/24/16 01:04	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.79		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 12:59	1
Boron	0.072	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 12:59	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B01 (6-12)

Lab Sample ID: 500-121567-6

Date Collected: 12/15/16 14:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.9

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		12/27/16 08:29	12/28/16 12:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:59	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:59	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 12:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 12:59	1
Manganese	0.17		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:59	1
Nickel	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 12:59	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 12:59	1
Zinc	<0.50		0.50	0.020	mg/L		12/27/16 08:29	12/28/16 12:59	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		12/27/16 08:26	12/28/16 06:31	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		12/27/16 08:29	12/27/16 23:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 23:08	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		12/27/16 11:30	12/28/16 09:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.018	0.0095	mg/Kg	☼	12/21/16 14:45	12/22/16 11:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/27/16 13:14	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (0-6)

Lab Sample ID: 500-121567-7

Date Collected: 12/15/16 15:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/16/16 14:45	12/21/16 16:12	1
Dibromofluoromethane	108		75 - 120	12/16/16 14:45	12/21/16 16:12	1
1,2-Dichloroethane-d4 (Surr)	112		69 - 134	12/16/16 14:45	12/21/16 16:12	1
Toluene-d8 (Surr)	109		75 - 123	12/16/16 14:45	12/21/16 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.078	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.052	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
1,3-Dichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (0-6)

Lab Sample ID: 500-121567-7

Date Collected: 12/15/16 15:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
4-Chloroaniline	<0.71		0.71	0.16	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2-Methylnaphthalene	<0.071		0.071	0.0064	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
4-Nitroaniline	<0.35 *		0.35	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Anthracene	<0.035		0.035	0.0058	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Carbazole	<0.18 *		0.18	0.087	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Fluoranthene	0.023	J	0.035	0.0065	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Pyrene	0.023	J	0.035	0.0069	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Benzo[a]anthracene	0.012	J	0.035	0.0047	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (0-6)

Lab Sample ID: 500-121567-7

Date Collected: 12/15/16 15:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.018	J	0.035	0.0095	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Benzo[b]fluoranthene	0.015	J	0.035	0.0075	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Benzo[k]fluoranthene	0.011	J	0.035	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Benzo[a]pyrene	0.018	J	0.035	0.0068	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Indeno[1,2,3-cd]pyrene	0.012	J	0.035	0.0091	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
Benzo[g,h,i]perylene	0.018	J	0.035	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1
3 & 4 Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/28/16 07:19	12/28/16 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		40 - 130	12/28/16 07:19	12/28/16 22:39	1
Phenol-d5	62		36 - 123	12/28/16 07:19	12/28/16 22:39	1
Nitrobenzene-d5	69		33 - 124	12/28/16 07:19	12/28/16 22:39	1
2-Fluorobiphenyl	73		42 - 115	12/28/16 07:19	12/28/16 22:39	1
2,4,6-Tribromophenol	55		25 - 130	12/28/16 07:19	12/28/16 22:39	1
Terphenyl-d14	100		25 - 150	12/28/16 07:19	12/28/16 22:39	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	0.94	0.20	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Arsenic	2.9		0.47	0.22	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Barium	39		0.47	0.086	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Beryllium	0.38		0.19	0.041	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Boron	2.2	J	2.4	0.33	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Cadmium	<0.094		0.094	0.027	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Calcium	9500		9.4	3.0	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Chromium	8.7	B	0.47	0.081	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Cobalt	3.8		0.24	0.053	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Copper	7.5		0.47	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Iron	8600		9.4	3.6	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Lead	7.7		0.24	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Magnesium	3800		4.7	1.9	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Manganese	230		0.47	0.093	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Nickel	9.1		0.47	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Potassium	480		24	3.9	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Selenium	0.30	J	0.47	0.23	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Silver	<0.24		0.24	0.055	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Sodium	390		47	6.2	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Thallium	0.65		0.47	0.23	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Vanadium	15		0.24	0.069	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1
Zinc	23		0.94	0.30	mg/Kg	☼	12/21/16 08:13	12/24/16 01:11	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 13:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 13:04	1
Boron	0.054	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 13:04	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (0-6)

Lab Sample ID: 500-121567-7

Date Collected: 12/15/16 15:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 91.4

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		12/27/16 08:29	12/28/16 13:04	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:04	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:04	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 13:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 13:04	1
Manganese	1.4		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:04	1
Nickel	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:04	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 13:04	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:04	1
Zinc	0.053	J	0.50	0.020	mg/L		12/27/16 08:29	12/28/16 13:04	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		12/27/16 08:26	12/28/16 06:38	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		12/27/16 08:29	12/27/16 23:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 23:11	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		12/27/16 11:30	12/28/16 09:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.017	0.0091	mg/Kg	☼	12/21/16 14:45	12/22/16 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/27/16 13:23	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (6-12)

Lab Sample ID: 500-121567-8

Date Collected: 12/15/16 15:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 120	12/16/16 14:45	12/21/16 16:38	1
Dibromofluoromethane	114		75 - 120	12/16/16 14:45	12/21/16 16:38	1
1,2-Dichloroethane-d4 (Surr)	112		69 - 134	12/16/16 14:45	12/21/16 16:38	1
Toluene-d8 (Surr)	105		75 - 123	12/16/16 14:45	12/21/16 16:38	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	☼	12/28/16 07:19	12/28/16 20:59	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
1,3-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (6-12)

Lab Sample ID: 500-121567-8

Date Collected: 12/15/16 15:15

Matrix: Solid

Date Received: 12/16/16 09:40

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	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
4-Nitroaniline	<0.37 *		0.37	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
N-Nitrosodiphenylamine	<0.19		0.19	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Carbazole	<0.19 *		0.19	0.092	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (6-12)

Lab Sample ID: 500-121567-8

Date Collected: 12/15/16 15:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Benzo[b]fluoranthene	<0.037		0.037	0.0079	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0095	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		40 - 130	12/28/16 07:19	12/28/16 20:59	1
Phenol-d5	53		36 - 123	12/28/16 07:19	12/28/16 20:59	1
Nitrobenzene-d5	68		33 - 124	12/28/16 07:19	12/28/16 20:59	1
2-Fluorobiphenyl	70		42 - 115	12/28/16 07:19	12/28/16 20:59	1
2,4,6-Tribromophenol	102		25 - 130	12/28/16 07:19	12/28/16 20:59	1
Terphenyl-d14	105		25 - 150	12/28/16 07:19	12/28/16 20:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.0	0.21	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Arsenic	4.2		0.51	0.23	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Barium	45		0.51	0.093	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Beryllium	0.40		0.20	0.044	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Boron	2.5		2.5	0.35	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Cadmium	0.090	J	0.10	0.029	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Calcium	14000		10	3.3	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Chromium	9.4	B	0.51	0.087	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Cobalt	5.5		0.25	0.057	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Copper	8.9		0.51	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Iron	11000		10	3.9	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Lead	5.2		0.25	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Magnesium	8800		5.1	2.1	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Manganese	360		0.51	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Nickel	13		0.51	0.14	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Potassium	530		25	4.1	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Selenium	0.30	J	0.51	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Sodium	300		51	6.7	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Thallium	0.80		0.51	0.25	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Vanadium	19		0.25	0.074	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	1
Zinc	23		1.0	0.32	mg/Kg	☼	12/21/16 08:13	12/24/16 01:34	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		12/27/16 08:29	12/28/16 13:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 13:09	1
Boron	0.060	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 13:09	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B03 (6-12)

Lab Sample ID: 500-121567-8

Date Collected: 12/15/16 15:15

Matrix: Solid

Date Received: 12/16/16 09:40

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	-	12/27/16 08:29	12/28/16 13:09	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Iron	<0.40		0.40	0.20	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Manganese	0.27		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Silver	<0.025		0.025	0.010	mg/L	-	12/27/16 08:29	12/28/16 13:09	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/27/16 08:29	12/28/16 13:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.37		0.025	0.010	mg/L	-	12/27/16 08:26	12/28/16 06:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/27/16 08:29	12/27/16 23:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/27/16 08:29	12/27/16 23:15	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	-	12/27/16 11:30	12/28/16 10:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.018	0.0094	mg/Kg	☼	12/21/16 14:45	12/22/16 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/27/16 13:31	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (0-6)

Lab Sample ID: 500-121567-9

Date Collected: 12/15/16 15:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 79.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Carbon disulfide	<0.0046		0.0046	0.00097	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/16/16 14:45	12/21/16 17:03	1
Dibromofluoromethane	110		75 - 120	12/16/16 14:45	12/21/16 17:03	1
1,2-Dichloroethane-d4 (Surr)	114		69 - 134	12/16/16 14:45	12/21/16 17:03	1
Toluene-d8 (Surr)	106		75 - 123	12/16/16 14:45	12/21/16 17:03	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	☼	12/28/16 07:19	12/28/16 21:24	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (0-6)

Lab Sample ID: 500-121567-9

Date Collected: 12/15/16 15:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 79.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
4-Nitroaniline	<0.41 *		0.41	0.17	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Carbazole	<0.21 *		0.21	0.10	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (0-6)

Lab Sample ID: 500-121567-9

Date Collected: 12/15/16 15:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 79.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		40 - 130	12/28/16 07:19	12/28/16 21:24	1
Phenol-d5	50		36 - 123	12/28/16 07:19	12/28/16 21:24	1
Nitrobenzene-d5	71		33 - 124	12/28/16 07:19	12/28/16 21:24	1
2-Fluorobiphenyl	73		42 - 115	12/28/16 07:19	12/28/16 21:24	1
2,4,6-Tribromophenol	98		25 - 130	12/28/16 07:19	12/28/16 21:24	1
Terphenyl-d14	104		25 - 150	12/28/16 07:19	12/28/16 21:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.2	0.26	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Arsenic	5.2		0.62	0.29	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Barium	89		0.62	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Beryllium	0.63		0.25	0.053	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Boron	3.9		3.1	0.43	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Cadmium	<0.12		0.12	0.036	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Calcium	5200		12	4.0	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Chromium	16	B	0.62	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Cobalt	6.3		0.31	0.070	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Copper	13		0.62	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Iron	16000		12	4.8	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Lead	11		0.31	0.15	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Magnesium	2900		6.2	2.5	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Manganese	390		0.62	0.12	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Nickel	15		0.62	0.17	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Potassium	970		31	5.0	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Selenium	0.63		0.62	0.31	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Silver	<0.31		0.31	0.072	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Sodium	730		62	8.1	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Thallium	1.1		0.62	0.30	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Vanadium	25		0.31	0.090	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1
Zinc	39		1.2	0.39	mg/Kg	☼	12/21/16 08:13	12/24/16 01:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.52		0.50	0.050	mg/L		12/27/16 08:29	12/28/16 13:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 13:22	1
Boron	0.080	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 13:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (0-6)

Lab Sample ID: 500-121567-9

Date Collected: 12/15/16 15:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 79.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/27/16 08:29	12/28/16 13:22	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:22	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:22	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 13:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 13:22	1
Manganese	0.19		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:22	1
Nickel	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:22	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 13:22	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:22	1
Zinc	<0.50		0.50	0.020	mg/L		12/27/16 08:29	12/28/16 13:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.52		0.025	0.010	mg/L		12/27/16 08:26	12/28/16 06:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/27/16 08:29	12/27/16 23:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 23:18	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		12/27/16 11:30	12/28/16 10:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.018	0.0097	mg/Kg	☼	12/21/16 14:45	12/22/16 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/27/16 13:40	1

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (6-12)

Lab Sample ID: 500-121567-10

Date Collected: 12/15/16 16:00

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

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	☼	12/16/16 14:45	12/21/16 17:29	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/16/16 14:45	12/21/16 17:29	1
Dibromofluoromethane	100		75 - 120	12/16/16 14:45	12/21/16 17:29	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	12/16/16 14:45	12/21/16 17:29	1
Toluene-d8 (Surr)	104		75 - 123	12/16/16 14:45	12/21/16 17:29	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	☼	12/28/16 07:19	12/28/16 21:49	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (6-12)

Lab Sample ID: 500-121567-10

Date Collected: 12/15/16 16:00

Matrix: Solid

Date Received: 12/16/16 09:40

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	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
4-Nitroaniline	<0.39 *		0.39	0.17	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Carbazole	<0.20 *		0.20	0.099	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (6-12)

Lab Sample ID: 500-121567-10

Date Collected: 12/15/16 16:00

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/28/16 07:19	12/28/16 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		40 - 130	12/28/16 07:19	12/28/16 21:49	1
Phenol-d5	53		36 - 123	12/28/16 07:19	12/28/16 21:49	1
Nitrobenzene-d5	76		33 - 124	12/28/16 07:19	12/28/16 21:49	1
2-Fluorobiphenyl	78		42 - 115	12/28/16 07:19	12/28/16 21:49	1
2,4,6-Tribromophenol	99		25 - 130	12/28/16 07:19	12/28/16 21:49	1
Terphenyl-d14	103		25 - 150	12/28/16 07:19	12/28/16 21:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.1	0.22	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Arsenic	4.7		0.53	0.24	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Barium	61		0.53	0.096	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Beryllium	0.49		0.21	0.046	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Boron	3.6		2.6	0.37	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Cadmium	<0.11		0.11	0.031	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Calcium	20000		11	3.4	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Chromium	13	B	0.53	0.091	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Cobalt	4.9		0.26	0.060	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Copper	10		0.53	0.11	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Iron	13000		11	4.1	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Lead	5.7		0.26	0.13	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Magnesium	13000		5.3	2.1	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Manganese	330		0.53	0.10	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Nickel	12		0.53	0.14	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Potassium	810		26	4.3	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Selenium	0.31	J	0.53	0.26	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Sodium	820		53	7.0	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Thallium	0.93		0.53	0.26	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Vanadium	22		0.26	0.077	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	1
Zinc	28		1.1	0.33	mg/Kg	☼	12/21/16 08:13	12/24/16 01:47	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		12/27/16 08:29	12/28/16 13:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/27/16 08:29	12/28/16 13:26	1
Boron	0.081	J	0.50	0.050	mg/L		12/27/16 08:29	12/28/16 13:26	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121567-1

Client Sample ID: 1314V3-32-B02 (6-12)

Lab Sample ID: 500-121567-10

Date Collected: 12/15/16 16:00

Matrix: Solid

Date Received: 12/16/16 09:40

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		12/27/16 08:29	12/28/16 13:26	1
Chromium	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:26	1
Cobalt	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:26	1
Iron	<0.40		0.40	0.20	mg/L		12/27/16 08:29	12/28/16 13:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/27/16 08:29	12/28/16 13:26	1
Manganese	0.22		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:26	1
Nickel	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:26	1
Selenium	<0.050		0.050	0.020	mg/L		12/27/16 08:29	12/28/16 13:26	1
Silver	<0.025		0.025	0.010	mg/L		12/27/16 08:29	12/28/16 13:26	1
Zinc	<0.50		0.50	0.020	mg/L		12/27/16 08:29	12/28/16 13:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.59	F1	0.025	0.010	mg/L		12/27/16 08:26	12/28/16 06:58	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		12/27/16 08:29	12/27/16 23:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/27/16 08:29	12/27/16 23:22	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		12/27/16 11:30	12/28/16 10:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.018	0.0095	mg/Kg	☼	12/21/16 14:45	12/22/16 11:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/27/16 13:48	1

Definitions/Glossary

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

TestAmerica Job ID: 500-121567-1

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.
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.
X	Surrogate is outside control limits
E	Result exceeded calibration range.

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.
F3	Duplicate RPD exceeds the control limit

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: 500-121567-1

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 61
Phone: 708.534.5200 Fax: 708.53



500-121567 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 #: 500-121567
Chain of Custody Number: EE4643
Page _____ of _____
Temperature °C of Cooler: 14

Client		Client Project #		Preservative		Parameter										Preservative Key	
EE		1009008.046-01														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 #		# of Containers		Matrix										Comments	
E74		50012744															
Project Location/State		Lab Project #		Date		Time											
Rock Island County, IL		50012744															
Sampler		Lab Proj															
S. Cooper		S weight															
Lab ID	MS/MSD	Sample ID		Date		Time											
1		1314V3-32-B06 (0-3)		12-15-16		1325		2 S		VOC		SVC		Total TAC		TAC metals	
2		1314V3-32-B05 (0-3)		12-15-16		1340		2 S									
3		1314V3-32-B04 (0-6)		12-15-16		1410		2 S									
4		1314V3-32-B04 (6-12)		12-15-16		1415		2 S									
5		1314V3-32-B01 (0-6)		12-15-16		1435		2 S									
6		1314V3-32-B01 (6-12)		12-15-16		1440		2 S									
7		1314V3-32-B03 (0-6)		12-15-16		1510		2 S									
8		1314V3-32-B03 (6-12)		12-15-16		1515		2 S									
9		1314V3-32-B02 (0-6)		12-15-16		1555		2 S									
10		1314V3-32-B02 (6-12)		12-15-16		1600		2 S									

Turnaround Time Required (Business Days) 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date _____

Relinquished By <u>[Signature]</u>	Company <u>EE</u>	Date <u>12-15-16</u>	Time <u>1700</u>	Received By <u>[Signature]</u>	Company <u>DA-ent</u>	Date <u>12/16/16</u>	Time <u>0940</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: 500-121567-1

Login Number: 121567

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	1.4
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):

1900 block of 5th Avenue (ISGS #1314V3-33)

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: 41.50817 Longitude: -90.51017

(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: 1610455289 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: 41.50817 Longitude: -90.51017

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 1314V3-33-B01, -B02, -B05, -B06, and -B07 were sampled within the construction zone adjacent to ISGS #1314V3-33 (Parking Lot). Refer to PSI Report for ISGS #1314V3-33 (Parking Lot) including Table 4-4, and Figures 4-3, 4-14, and 4-15.

- 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 J121566-1.

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

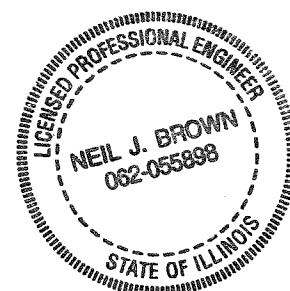
Printed Name:

Neil J. Brown

3/17/17

Date:

Licensed Professional Engineer or
 Licensed Professional Geologist Signature:



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

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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 64C08 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-33 (Parking Lot)				Comparison Criteria					
	1314V3-33-B01		1314V3-33-B02		MACs			TACO		
BORING	1314V3-33-B01		1314V3-33-B02		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-33-B01 (0-6)	1314V3-33-B01 (6-12)	1314V3-33-B02 (0-5)	1314V3-33-B02 (5-9.4)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	0-5	5-9.4						
pH	7.8	8.4	8.6	8.6						
VOCs (None Detected)										
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	0.013 J	ND U	0.012 J	0.0066 J	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.032 J	ND U	0.041	0.021 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.13	ND U	0.15	0.072	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.16 †	ND U	0.17 †	0.084	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.23	ND U	0.26	0.12	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.051	ND U	0.056	0.024 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.069	ND U	0.098	0.049	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	0.12	ND U	0.14	0.07	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.023 J	ND U	0.021 J	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.27	ND U	0.32 J	0.14	3,100	--	--	3,100	82,000	--
Fluorene	0.012 J	ND U	0.014 J	0.0074 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.056	ND U	0.061	0.032 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	0.0065 J	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.16	ND U	0.19	0.082	--	--	--	--	--	--
Pyrene	0.28	ND U	0.31 J	0.13	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.25 J	ND U	ND UJ	0.26 J	5	--	--	31	82	--
Arsenic	4.6	5.6	2	2.7	11.3	13	--	13	61	--
Barium	70	64	26 J	26	1,500	--	--	5,500	14,000	--
Beryllium	0.52	0.5	0.2 J	0.24	22	--	--	160	410	--
Boron	1.5 J	1.7 J	1.1 J	1.3 J	40	--	--	16,000	41,000	--
Cadmium	0.15	0.17	0.14	0.057 J	5.2	--	--	78	200	--
Calcium	5,700	13,000	7,800 J	10,000	--	--	--	--	--	--
Chromium	13	14	6.3	5.8	21	--	--	230	690	--
Cobalt	7.4	8.2	4.1	4.3	20	--	--	4,700	12,000	--
Copper	12	13	6.4	6.3	2,900	--	--	2,900	8,200	--
Iron	14,000	14,000	7,000	11,000	15,000	15,900	--	--	--	--
Lead	15	9.4	20 J	6.8	107	--	--	400	700	--
Magnesium	2,000	8,100	2,900	5,700	325,000	--	--	--	730,000	--
Manganese	330	330	210 J	270	630	636	--	1,600	4,100	--
Mercury	0.025	0.033	0.011 J	0.012 J	0.89	--	--	10	0.1	--
Nickel	16	22	9.9 J	9.8	100	--	--	1,600	4,100	--
Potassium	680	650	260	260	--	--	--	--	--	--
Selenium	0.29 J	ND U	0.3 J	0.33 J	1.3	--	--	390	1,000	--
Sodium	460	170	85	140	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	19	22	10	10	550	--	--	550	1400	--
Zinc	98	43	25	34	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.59	0.65	0.39 J	0.51	--	--	--	--	--	2
Boron	0.065 J	0.068 J	ND U	0.055 J	--	--	--	--	--	2
Cadmium	ND U	ND U	0.0026 J	0.0023 J	--	--	--	--	--	0.005
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	2.2 L	0.26 L	1.1 L	1.7 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	0.014 J	0.021 J	--	--	--	--	--	0.1
Zinc	0.13 J	ND U	0.072 J	0.049 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.16 L	0.11	0.32 L	0.24 L	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-33 (Parking Lot)				Comparison Criteria					
	1314V3-33-B05		1314V3-33-B06		MACs			TACO		
BORING	1314V3-33-B05 (0-6)		1314V3-33-B06 (0-6)		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-33-B05 (0-6)	1314V3-33-B05 (6-12)	1314V3-33-B06 (0-6)	1314V3-33-B06 (6-12)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	0-6	6-12						
pH	8.4	7.9	8	7.6						
VOCs (None Detected)										
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.0094 J	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.0089 J	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	0.015 J	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	0.008 J	ND U	ND U	ND U	--	--	--	--	--	--
Pyrene	0.017 J	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.34 J	ND U	0.28 J	0.26 J	5	--	--	31	82	--
Arsenic	5.9	5.1	5.5	4.9	11.3	13	--	13	61	--
Barium	83	69	65	47	1,500	--	--	5,500	14,000	--
Beryllium	0.53	0.49	0.54	0.44	22	--	--	160	410	--
Boron	2 J	2 J	1.4 J	2 J	40	--	--	16,000	41,000	--
Cadmium	0.21	0.13	0.13	0.1 J	5.2	--	--	78	200	--
Calcium	14,000	15,000	29,000	20,000	--	--	--	--	--	--
Chromium	13	14	13	12	21	--	--	230	690	--
Cobalt	9.8	7	9	6.5	20	--	--	4,700	12,000	--
Copper	12	12	14	12	2,900	--	--	2,900	8,200	--
Iron	14,000	14,000	14,000	12,000	15,000	15,900	--	--	--	--
Lead	24	8.7	15	8.3	107	--	--	400	700	--
Magnesium	2,600	10,000	2,100	12,000	325,000	--	--	--	730,000	--
Manganese	590	340	390	240	630	636	--	1,600	4,100	--
Mercury	0.041	0.027	0.039	0.021	0.89	--	--	10	0.1	--
Nickel	19	18	20	15	100	--	--	1,600	4,100	--
Potassium	700	690	710	520	--	--	--	--	--	--
Selenium	ND U	0.4 J	ND U	ND U	1.3	--	--	390	1,000	--
Sodium	290	170	95	96	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	21	21	21	20	550	--	--	550	1400	--
Zinc	62	45	47	34	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.68	0.52	0.7	0.65	--	--	--	--	--	2
Boron	0.064 J	0.071 J	0.056 J	0.084 J	--	--	--	--	--	2
Cadmium	0.0024 J	ND U	ND U	0.002 J	--	--	--	--	--	0.005
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	4.1 L	0.21 L	0.43 L	0.26 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.045 J	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.35 L	0.25 L	0.22 L	0.076	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-33 (Parking Lot)		Comparison Criteria						
	1314V3-33-B07		MACs			TACO			
BORING	1314V3-33-B07 (0-8) 1314V3-33-B07 (0-8)D		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	
SAMPLE	Soil	Soil							
MATRIX	0-8	0-8							
DEPTH (feet)	8.4	8.6							
pH									
VOCs (None Detected)									
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	ND U	--	--	--	--	--	--	
Acenaphthene	ND U	ND U	570	--	--	4,700	120,000	--	
Acenaphthylene	ND U	ND U	--	--	--	--	--	--	
Anthracene	ND U	0.0071 J	12,000	--	--	23,000	610,000	--	
Benzo(a)anthracene	0.04	0.048	0.9	1.8	1.1	1.8	170	--	
Benzo(a)pyrene	0.057	0.065	0.09	2.1	1.3	2.1	17	--	
Benzo(b)fluoranthene	0.093	0.1	0.9	2.1	1.5	2.1	170	--	
Benzo(g,h,i)perylene	0.022 J	0.022 J	--	--	--	--	--	--	
Benzo(k)fluoranthene	0.036 J	0.036 J	9	--	--	9	1,700	--	
Bis(2-ethylhexyl) phthalate	ND U	ND U	46	--	--	46	4,100	--	
Carbazole	ND U	ND U	0.6	--	--	32	6,200	--	
Chrysene	0.049	0.048	88	--	--	88	17,000	--	
Dibenz(a,h)anthracene	ND U	ND U	0.09	0.42	0.2	0.42	17	--	
Dibenzofuran	ND U	ND U	--	--	--	--	--	--	
Fluoranthene	0.085	0.085	3,100	--	--	3,100	82,000	--	
Fluorene	ND U	ND U	560	--	--	3,100	82,000	--	
Indeno(1,2,3-cd)pyrene	0.029 J	0.031 J	0.9	1.6	0.9	1.6	170	--	
Naphthalene	ND U	ND U	1.8	--	--	170	1.8	--	
Phenanthrene	0.037	0.034 J	--	--	--	--	--	--	
Pyrene	0.085	0.097	2,300	--	--	2,300	61,000	--	
Inorganics (mg/kg)									
Antimony	ND U	0.37 J	5	--	--	31	82	--	
Arsenic	6.4	5.7	11.3	13	--	13	61	--	
Barium	53	53	1,500	--	--	5,500	14,000	--	
Beryllium	0.41	0.42	22	--	--	160	410	--	
Boron	1.5 J	1.9 J	40	--	--	16,000	41,000	--	
Cadmium	0.2	0.2	5.2	--	--	78	200	--	
Calcium	6,200 J	13,000 J	--	--	--	--	--	--	
Chromium	11	11	21	--	--	230	690	--	
Cobalt	6.4	6.6	20	--	--	4,700	12,000	--	
Copper	11	11	2,900	--	--	2,900	8,200	--	
Iron	12,000	12,000	15,000	15,900	--	--	--	--	
Lead	47	49	107	--	--	400	700	--	
Magnesium	3,400	3,400	325,000	--	--	--	730,000	--	
Manganese	320	360	630	636	--	1,600	4,100	--	
Mercury	0.041	0.031	0.89	--	--	10	0.1	--	
Nickel	15	16	100	--	--	1,600	4,100	--	
Potassium	620	700	--	--	--	--	--	--	
Selenium	ND U	0.34 J	1.3	--	--	390	1,000	--	
Sodium	120	130	--	--	--	--	--	--	
Thallium	ND U	ND U	2.6	--	--	6.3	160	--	
Vanadium	18	18	550	--	--	550	1400	--	
Zinc	43	47	5,100	--	--	23,000	61,000	--	
TCLP Metals (mg/L)									
Barium	0.6	0.68	--	--	--	--	--	2	
Boron	0.07 J	0.058 J	--	--	--	--	--	2	
Cadmium	0.0023 J	0.0023 J	--	--	--	--	--	0.005	
Cobalt	ND U	ND U	--	--	--	--	--	1	
Lead	0.02 L	0.034 L	--	--	--	--	--	0.0075	
Manganese	0.2 L	0.32 L	--	--	--	--	--	0.15	
Nickel	ND U	ND U	--	--	--	--	--	0.1	
Zinc	0.051 J	0.036 J	--	--	--	--	--	5	
SPLP Metals (mg/L)									
Cadmium	NA	NA	--	--	--	--	--	0.005	
Lead	0.13 L	0.077 L	--	--	--	--	--	0.0075	
Manganese	0.31 L	0.26 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: 500-121566-1
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:
12/30/2016 8:00:03 AM

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

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Case Narrative

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

TestAmerica Job ID: 500-121566-1

Job ID: 500-121566-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-121566-1**

Comments

No additional comments.

Receipt

The samples were received on 12/16/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The following samples contained one base/neutral surrogate outside acceptance limits: 1314V3-33-B03 (0-6) (500-121566-7), 1314V3-33-B04 (0-6) (500-121566-11), (500-121566-E-1-M MS) and (500-121566-E-1-N MSD). 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 matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121566-E-1-M MS) and (500-121566-E-1-N MSD)

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: 500-121566-1

Client Sample ID: 1314V3-33-B02 (0-5)

Lab Sample ID: 500-121566-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0065	J	0.034	0.0052	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.012	J	0.034	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.014	J	0.034	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.19		0.034	0.0047	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.041		0.034	0.0057	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.32	F1	0.034	0.0063	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.31	F1	0.034	0.0068	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.15		0.034	0.0046	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.14		0.034	0.0093	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.26		0.034	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.098		0.034	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.17		0.034	0.0066	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.061		0.034	0.0088	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.021	J	0.034	0.0066	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.056		0.034	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.0		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	26		0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.20	J	0.21	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	1.1	J F1	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	7800		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.3	B	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.1		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	6.4		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	7000	B	10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	20		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2900	B	5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.9		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	260		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J F1	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	85	B	51	6.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	10		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	25		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.39	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.072	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.32		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.011	J	0.016	0.0084	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.0066	J	0.034	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0074	J	0.034	0.0049	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.082		0.034	0.0048	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.021	J	0.034	0.0058	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: 500-121566-1

Client Sample ID: 1314V3-33-B02 (5-9.4) (Continued)

Lab Sample ID: 500-121566-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.14		0.034	0.0064	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.13		0.034	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.072		0.034	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.070		0.034	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.12		0.034	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.049		0.034	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.084		0.034	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.032	J	0.034	0.0090	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.034	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.7		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	26		0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.24		0.21	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	1.3	J	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.057	J	0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	10000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.8	B	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.3		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	6.3		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	6.8		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5700	B	5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.8		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	260		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	140	B	51	6.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	10		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.0	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.049	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.012	J	0.016	0.0085	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B07 (0-8)

Lab Sample ID: 500-121566-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.037		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.085		0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.085		0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.040		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.049		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.093		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.036	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.057		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8) (Continued)

Lab Sample ID: 500-121566-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.029	J	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.4		0.57	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	53		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	1.5	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	6200		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.57	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.4		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	47		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3400	B	5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	620		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	120	B	57	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.020		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.051	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.13		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.31		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.041		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B07 (0-8)D

Lab Sample ID: 500-121566-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.034	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0071	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.085		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.097		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.048		0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.048		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.10		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.036	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.065		0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.031	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
Antimony	0.37	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.7		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	53		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	1.9	J	2.9	0.40	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: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)D (Continued)

Lab Sample ID: 500-121566-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.20		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	13000		12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.6		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	12	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	49		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3400	B	5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	700		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	130	B	58	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.2	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.68		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.058	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.034		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.32		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.036	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.077		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.26		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B01 (0-6)

Lab Sample ID: 500-121566-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.013	J	0.039	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.012	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.032	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.27		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.28		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.13		0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.12		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.23		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.069		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.16		0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.056		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.023	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.051		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	4.6		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	1.5	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	5700		12	3.8	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: 500-121566-1

Client Sample ID: 1314V3-33-B01 (0-6) (Continued)

Lab Sample ID: 500-121566-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	13	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.4		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2000	B	5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	680		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.29	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	460	B	59	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	98		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.16		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.6		0.63	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.63	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.25	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	3.1	0.44	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.13	0.036	mg/Kg	1	☼	6010B	Total/NA
Calcium	13000		13	4.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.63	0.11	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.2		0.31	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.63	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	13	4.8	mg/Kg	1	☼	6010B	Total/NA
Lead	9.4		0.31	0.16	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8100	B	6.3	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.63	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	22		0.63	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	650		31	5.1	mg/Kg	1	☼	6010B	Total/NA
Sodium	170	B	63	8.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.31	0.091	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.3	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.26		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.033		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B03 (0-6)

Lab Sample ID: 500-121566-7

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: 500-121566-1

Client Sample ID: 1314V3-33-B03 (0-6) (Continued)

Lab Sample ID: 500-121566-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.0		0.037	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.50		0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.030	J	0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	2.5		0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	1.7		0.19	0.044	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phtalate	0.13	J	0.19	0.069	mg/Kg	1	☼	8270D	Total/NA
Fluorene - DL	2.9		0.75	0.11	mg/Kg	20	☼	8270D	Total/NA
Phenanthrene - DL	26		0.75	0.10	mg/Kg	20	☼	8270D	Total/NA
Anthracene - DL	6.4		0.75	0.13	mg/Kg	20	☼	8270D	Total/NA
Carbazole - DL	3.8		3.8	1.9	mg/Kg	20	☼	8270D	Total/NA
Fluoranthene - DL	34		0.75	0.14	mg/Kg	20	☼	8270D	Total/NA
Pyrene - DL	28		0.75	0.15	mg/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene - DL	14		0.75	0.10	mg/Kg	20	☼	8270D	Total/NA
Chrysene - DL	15		0.75	0.20	mg/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	18		0.75	0.16	mg/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene - DL	6.8		0.75	0.22	mg/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene - DL	13		0.75	0.15	mg/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene - DL	6.8		0.75	0.19	mg/Kg	20	☼	8270D	Total/NA
Dibenz(a,h)anthracene - DL	2.1		0.75	0.14	mg/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene - DL	6.5		0.75	0.24	mg/Kg	20	☼	8270D	Total/NA
Arsenic	5.4		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	1.5	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	5800		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.6		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	30		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2800	B	5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	470		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	620		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.44	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	350	B	57	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.046		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B03 (6-12)

Lab Sample ID: 500-121566-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.043		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.011	J	0.039	0.0065	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: 500-121566-1

Client Sample ID: 1314V3-33-B03 (6-12) (Continued)

Lab Sample ID: 500-121566-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.052		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.051		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.023	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.034	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.016	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.024	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	5.5		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.23	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	1.6	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	13000		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.2		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8400	B	5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	490		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	540		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.49	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	250	B	58	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.067	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.026		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B05 (0-6)

Lab Sample ID: 500-121566-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0080	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.015	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.017	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0094	J	0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0089	J	0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.34	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.9		0.61	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	83		0.61	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000		12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.61	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: 500-121566-1

Client Sample ID: 1314V3-33-B05 (0-6) (Continued)

Lab Sample ID: 500-121566-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	9.8		0.30	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.61	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	12	4.7	mg/Kg	1	☼	6010B	Total/NA
Lead	24		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2600	B	6.1	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	590		0.61	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.61	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	700		30	5.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	290	B	61	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.089	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.68		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	4.1		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.045	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.35		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.041		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.1		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	69		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	8.7		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	10000	B	6.0	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	18		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	690		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.40	J	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	170	B	60	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.52		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.071	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.25		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B04 (0-6)

Lab Sample ID: 500-121566-11

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: 500-121566-1

Client Sample ID: 1314V3-33-B04 (0-6) (Continued)

Lab Sample ID: 500-121566-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.011	J	0.038	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0097	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0098	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.014	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.011	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.18		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.033	J	0.038	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.36		0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.62		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.20		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.22		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.12	J	0.19	0.071	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.36		0.038	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.12		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.20		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.11		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.41	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.8		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	140		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		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	2.9		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	16000		12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.5		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	12	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	890		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7600	B	5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	640		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.42	J	0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	630	B	58	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	420		1.2	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.87		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.071	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.038		0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	1.7		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.48		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	3.1		0.50	0.020	mg/L	1		6010B	TCLP
Cadmium	0.0039	J	0.0050	0.0020	mg/L	1		6010B	SPLP East
Lead	3.7		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.49		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.11		0.017	0.0091	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: 500-121566-1

Client Sample ID: 1314V3-33-B04 (6-12)

Lab Sample ID: 500-121566-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.37	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.3		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000	B	6.0	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	610		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	260	B	60	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	37		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.054	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.64		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B06 (0-6)

Lab Sample ID: 500-121566-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.28	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.5		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	65		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	1.4	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000		12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.0		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2100	B	5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	710		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	95	B	58	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.084	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: 500-121566-1

Client Sample ID: 1314V3-33-B06 (0-6) (Continued)

Lab Sample ID: 500-121566-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	47		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.056	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.43		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.26	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.9		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	3.0	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J	0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	20000		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.5		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	8.3		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000	B	5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	240		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	520		30	4.8	mg/Kg	1	☼	6010B	Total/NA
Sodium	96	B	59	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.26		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.076		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.021	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		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: 500-121566-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
6010B	SPLP Metals	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: 500-121566-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121566-1	1314V3-33-B02 (0-5)	Solid	12/15/16 08:15	12/16/16 09:40
500-121566-2	1314V3-33-B02 (5-9.4)	Solid	12/15/16 08:20	12/16/16 09:40
500-121566-3	1314V3-33-B07 (0-8)	Solid	12/15/16 08:50	12/16/16 09:40
500-121566-4	1314V3-33-B07 (0-8)D	Solid	12/15/16 08:50	12/16/16 09:40
500-121566-5	1314V3-33-B01 (0-6)	Solid	12/15/16 09:10	12/16/16 09:40
500-121566-6	1314V3-33-B01 (6-12)	Solid	12/15/16 09:15	12/16/16 09:40
500-121566-7	1314V3-33-B03 (0-6)	Solid	12/15/16 09:40	12/16/16 09:40
500-121566-8	1314V3-33-B03 (6-12)	Solid	12/15/16 09:45	12/16/16 09:40
500-121566-9	1314V3-33-B05 (0-6)	Solid	12/15/16 10:15	12/16/16 09:40
500-121566-10	1314V3-33-B05 (6-12)	Solid	12/15/16 10:20	12/16/16 09:40
500-121566-11	1314V3-33-B04 (0-6)	Solid	12/15/16 10:55	12/16/16 09:40
500-121566-12	1314V3-33-B04 (6-12)	Solid	12/15/16 11:00	12/16/16 09:40
500-121566-13	1314V3-33-B06 (0-6)	Solid	12/15/16 11:40	12/16/16 09:40
500-121566-14	1314V3-33-B06 (6-12)	Solid	12/15/16 11:45	12/16/16 09:40

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (0-5)

Lab Sample ID: 500-121566-1

Date Collected: 12/15/16 08:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 95.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.014		0.014	0.0061	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Carbon disulfide	<0.0035		0.0035	0.00073	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00039	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,1-Dichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,2-Dichloropropane	<0.0014		0.0014	0.00036	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Ethylbenzene	<0.0014		0.0014	0.00067	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Styrene	<0.0014		0.0014	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Toluene	<0.0014		0.0014	0.00035	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Trichloroethene	<0.0014		0.0014	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Vinyl acetate	<0.0035		0.0035	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Vinyl chloride	<0.0014		0.0014	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/16/16 14:45	12/21/16 17:54	1
Dibromofluoromethane	111		75 - 120	12/16/16 14:45	12/21/16 17:54	1
1,2-Dichloroethane-d4 (Surr)	112		69 - 134	12/16/16 14:45	12/21/16 17:54	1
Toluene-d8 (Surr)	109		75 - 123	12/16/16 14:45	12/21/16 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17	F1	0.17	0.076	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Bis(2-chloroethyl)ether	<0.17	F1	0.17	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (0-5)

Lab Sample ID: 500-121566-1

Date Collected: 12/15/16 08:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 95.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
N-Nitrosodi-n-propylamine	<0.069	F1	0.069	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Naphthalene	0.0065	J	0.034	0.0052	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Hexachlorocyclopentadiene	<0.69	F1	0.69	0.20	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2-Nitroaniline	<0.17	F1	0.17	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2-Nitrophenol	<0.34		0.34	0.080	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,4-Dinitrophenol	<0.69	F1	0.69	0.60	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Acenaphthene	0.012	J	0.034	0.0061	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
4-Nitrophenol	<0.69		0.69	0.32	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Fluorene	0.014	J	0.034	0.0048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Hexachlorobenzene	<0.069		0.069	0.0079	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Diethyl phthalate	<0.17	F1	0.17	0.058	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Pentachlorophenol	<0.69	F1	0.69	0.55	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
4,6-Dinitro-2-methylphenol	<0.69	F1	0.69	0.27	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Phenanthrene	0.19		0.034	0.0047	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Anthracene	0.041		0.034	0.0057	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Fluoranthene	0.32	F1	0.034	0.0063	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Pyrene	0.31	F1	0.034	0.0068	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Butyl benzyl phthalate	<0.17	F1	0.17	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Benzo[a]anthracene	0.15		0.034	0.0046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (0-5)

Lab Sample ID: 500-121566-1

Date Collected: 12/15/16 08:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 95.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.14		0.034	0.0093	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Bis(2-ethylhexyl) phthalate	<0.17	F1	0.17	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Di-n-octyl phthalate	<0.17	F1	0.17	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Benzo[b]fluoranthene	0.26		0.034	0.0073	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Benzo[k]fluoranthene	0.098		0.034	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Benzo[a]pyrene	0.17		0.034	0.0066	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Indeno[1,2,3-cd]pyrene	0.061		0.034	0.0088	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Dibenz(a,h)anthracene	0.021	J	0.034	0.0066	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
Benzo[g,h,i]perylene	0.056		0.034	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	12/23/16 07:25	12/27/16 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/23/16 07:25	12/27/16 15:03	1
Phenol-d5	112		36 - 123	12/23/16 07:25	12/27/16 15:03	1
Nitrobenzene-d5	105		33 - 124	12/23/16 07:25	12/27/16 15:03	1
2-Fluorobiphenyl	95		42 - 115	12/23/16 07:25	12/27/16 15:03	1
2,4,6-Tribromophenol	75		25 - 130	12/23/16 07:25	12/27/16 15:03	1
Terphenyl-d14	130		25 - 150	12/23/16 07:25	12/27/16 15:03	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	☼	12/22/16 14:34	12/28/16 18:05	1
Arsenic	2.0		0.51	0.24	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Barium	26		0.51	0.094	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Beryllium	0.20	J	0.21	0.044	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Boron	1.1	J F1	2.6	0.36	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Cadmium	0.14		0.10	0.030	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Calcium	7800		10	3.3	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Chromium	6.3	B	0.51	0.088	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Cobalt	4.1		0.26	0.058	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Copper	6.4		0.51	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Iron	7000	B	10	4.0	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Lead	20		0.26	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Magnesium	2900	B	5.1	2.1	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Manganese	210		0.51	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Nickel	9.9		0.51	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Potassium	260		26	4.2	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Selenium	0.30	J F1	0.51	0.25	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Sodium	85	B	51	6.8	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Vanadium	10		0.26	0.075	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1
Zinc	25		1.0	0.32	mg/Kg	☼	12/22/16 14:34	12/28/16 18:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.39	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 16:22	1
Boron	<0.50		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:22	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (0-5)

Lab Sample ID: 500-121566-1

Date Collected: 12/15/16 08:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 95.1

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	-	12/22/16 13:48	12/23/16 16:22	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Manganese	1.1		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Nickel	0.014	J	0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:22	1
Zinc	0.072	J	0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.32		0.025	0.010	mg/L	-	12/23/16 14:24	12/28/16 02:59	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	-	12/22/16 13:48	12/23/16 14:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 14:50	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	-	12/22/16 14:30	12/23/16 11:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J	0.016	0.0084	mg/Kg	☼	12/21/16 14:45	12/22/16 09:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/23/16 17:45	1

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Date Collected: 12/15/16 08:20

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 120	12/16/16 14:45	12/21/16 18:19	1
Dibromofluoromethane	105		75 - 120	12/16/16 14:45	12/21/16 18:19	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/16/16 14:45	12/21/16 18:19	1
Toluene-d8 (Surr)	107		75 - 123	12/16/16 14:45	12/21/16 18:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.077	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Date Collected: 12/15/16 08:20

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Acenaphthylene	<0.034		0.034	0.0046	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Acenaphthene	0.0066	J	0.034	0.0062	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Fluorene	0.0074	J	0.034	0.0049	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Phenanthrene	0.082		0.034	0.0048	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Anthracene	0.021	J	0.034	0.0058	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Fluoranthene	0.14		0.034	0.0064	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Pyrene	0.13		0.034	0.0069	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Benzo[a]anthracene	0.072		0.034	0.0047	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Date Collected: 12/15/16 08:20

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.070		0.034	0.0094	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Benzo[b]fluoranthene	0.12		0.034	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Benzo[k]fluoranthene	0.049		0.034	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Benzo[a]pyrene	0.084		0.034	0.0067	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Indeno[1,2,3-cd]pyrene	0.032	J	0.034	0.0090	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Benzo[g,h,i]perylene	0.024	J	0.034	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	12/23/16 07:25	12/27/16 12:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	110		40 - 130				12/23/16 07:25	12/27/16 12:33	1
Phenol-d5	119		36 - 123				12/23/16 07:25	12/27/16 12:33	1
Nitrobenzene-d5	106		33 - 124				12/23/16 07:25	12/27/16 12:33	1
2-Fluorobiphenyl	97		42 - 115				12/23/16 07:25	12/27/16 12:33	1
2,4,6-Tribromophenol	84		25 - 130				12/23/16 07:25	12/27/16 12:33	1
Terphenyl-d14	126		25 - 150				12/23/16 07:25	12/27/16 12:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.0	0.21	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Arsenic	2.7		0.51	0.24	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Barium	26		0.51	0.094	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Beryllium	0.24		0.21	0.045	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Boron	1.3	J	2.6	0.36	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Cadmium	0.057	J	0.10	0.030	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Calcium	10000		10	3.3	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Chromium	5.8	B	0.51	0.088	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Cobalt	4.3		0.26	0.058	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Copper	6.3		0.51	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Iron	11000	B	10	4.0	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Lead	6.8		0.26	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Magnesium	5700	B	5.1	2.1	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Manganese	270		0.51	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Nickel	9.8		0.51	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Potassium	260		26	4.2	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Selenium	0.33	J	0.51	0.25	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Sodium	140	B	51	6.8	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Vanadium	10		0.26	0.075	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	1
Zinc	34		1.0	0.33	mg/Kg	☼	12/22/16 14:34	12/28/16 18:25	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		12/22/16 13:48	12/23/16 16:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 16:27	1
Boron	0.055	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:27	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Date Collected: 12/15/16 08:20

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0023	J	0.0050	0.0020	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Manganese	1.7		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Nickel	0.021	J	0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:27	1
Zinc	0.049	J	0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.24		0.025	0.010	mg/L	-	12/23/16 14:24	12/28/16 03:21	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	-	12/22/16 13:48	12/23/16 14:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 14:53	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	-	12/22/16 14:30	12/23/16 11:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.016	0.0085	mg/Kg	☼	12/21/16 14:45	12/22/16 09:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/23/16 17:45	1

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)

Lab Sample ID: 500-121566-3

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.7

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	☼	12/16/16 14:45	12/21/16 18:45	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Chlorobenzene	<0.0017		0.0017	0.00065	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Tetrachloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/16/16 14:45	12/21/16 18:45	1
Dibromofluoromethane	109		75 - 120	12/16/16 14:45	12/21/16 18:45	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/16/16 14:45	12/21/16 18:45	1
Toluene-d8 (Surr)	108		75 - 123	12/16/16 14:45	12/21/16 18:45	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	☼	12/23/16 07:25	12/27/16 12:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)

Lab Sample ID: 500-121566-3

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

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	☼	12/23/16 07:25	12/27/16 12:58	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Phenanthrene	0.037		0.037	0.0052	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Fluoranthene	0.085		0.037	0.0070	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Pyrene	0.085		0.037	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Benzo[a]anthracene	0.040		0.037	0.0050	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)

Lab Sample ID: 500-121566-3

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.049		0.037	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Benzo[b]fluoranthene	0.093		0.037	0.0081	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Benzo[k]fluoranthene	0.036 J		0.037	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Benzo[a]pyrene	0.057		0.037	0.0073	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Indeno[1,2,3-cd]pyrene	0.029 J		0.037	0.0097	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
Benzo[g,h,i]perylene	0.022 J		0.037	0.012	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/23/16 07:25	12/27/16 12:58	1
Phenol-d5	113		36 - 123	12/23/16 07:25	12/27/16 12:58	1
Nitrobenzene-d5	103		33 - 124	12/23/16 07:25	12/27/16 12:58	1
2-Fluorobiphenyl	95		42 - 115	12/23/16 07:25	12/27/16 12:58	1
2,4,6-Tribromophenol	60		25 - 130	12/23/16 07:25	12/27/16 12:58	1
Terphenyl-d14	126		25 - 150	12/23/16 07:25	12/27/16 12:58	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	☼	12/22/16 14:34	12/28/16 18:30	1
Arsenic	6.4		0.57	0.27	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Barium	53		0.57	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Beryllium	0.41		0.23	0.050	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Boron	1.5 J		2.9	0.40	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Cadmium	0.20		0.11	0.033	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Calcium	6200		11	3.7	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Chromium	11 B		0.57	0.099	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Cobalt	6.4		0.29	0.065	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Copper	11		0.57	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Iron	12000 B		11	4.4	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Lead	47		0.29	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Magnesium	3400 B		5.7	2.3	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Manganese	320		0.57	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Nickel	15		0.57	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Potassium	620		29	4.7	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Sodium	120 B		57	7.6	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Vanadium	18		0.29	0.084	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	1
Zinc	43		1.1	0.36	mg/Kg	☼	12/22/16 14:34	12/28/16 18:30	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		12/22/16 13:48	12/23/16 16:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 16:32	1
Boron	0.070 J		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:32	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)

Lab Sample ID: 500-121566-3

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0023	J	0.0050	0.0020	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Lead	0.020		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Manganese	0.20		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:32	1
Zinc	0.051	J	0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:32	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.13		0.0075	0.0075	mg/L	-	12/23/16 14:24	12/28/16 03:28	1
Manganese	0.31		0.025	0.010	mg/L	-	12/23/16 14:24	12/28/16 03:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 13:48	12/23/16 14:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 14:57	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	-	12/22/16 14:30	12/23/16 11:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.018	0.0095	mg/Kg	☼	12/21/16 14:45	12/22/16 09:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/23/16 17:45	1

Client Sample Results

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

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)D

Lab Sample ID: 500-121566-4

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 19:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 120	12/16/16 14:45	12/21/16 19:10	1
Dibromofluoromethane	99		75 - 120	12/16/16 14:45	12/21/16 19:10	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	12/16/16 14:45	12/21/16 19:10	1
Toluene-d8 (Surr)	103		75 - 123	12/16/16 14:45	12/21/16 19:10	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	☼	12/23/16 07:25	12/27/16 15:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)D

Lab Sample ID: 500-121566-4

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.4

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	☼	12/23/16 07:25	12/27/16 15:28	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Phenanthrene	0.034	J	0.039	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Anthracene	0.0071	J	0.039	0.0065	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Fluoranthene	0.085		0.039	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Pyrene	0.097		0.039	0.0077	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Benzo[a]anthracene	0.048		0.039	0.0052	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)D

Lab Sample ID: 500-121566-4

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.048		0.039	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Benzo[b]fluoranthene	0.10		0.039	0.0084	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Benzo[k]fluoranthene	0.036 J		0.039	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Benzo[a]pyrene	0.065		0.039	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Indeno[1,2,3-cd]pyrene	0.031 J		0.039	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
Benzo[g,h,i]perylene	0.022 J		0.039	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		40 - 130	12/23/16 07:25	12/27/16 15:28	1
Phenol-d5	110		36 - 123	12/23/16 07:25	12/27/16 15:28	1
Nitrobenzene-d5	100		33 - 124	12/23/16 07:25	12/27/16 15:28	1
2-Fluorobiphenyl	92		42 - 115	12/23/16 07:25	12/27/16 15:28	1
2,4,6-Tribromophenol	59		25 - 130	12/23/16 07:25	12/27/16 15:28	1
Terphenyl-d14	132		25 - 150	12/23/16 07:25	12/27/16 15:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37 J		1.2	0.24	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Arsenic	5.7		0.58	0.27	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Barium	53		0.58	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Beryllium	0.42		0.23	0.050	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Boron	1.9 J		2.9	0.40	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Cadmium	0.20		0.12	0.033	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Calcium	13000		12	3.7	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Chromium	11 B		0.58	0.099	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Cobalt	6.6		0.29	0.065	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Copper	11		0.58	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Iron	12000 B		12	4.4	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Lead	49		0.29	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Magnesium	3400 B		5.8	2.3	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Manganese	360		0.58	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Nickel	16		0.58	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Potassium	700		29	4.7	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Selenium	0.34 J		0.58	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Sodium	130 B		58	7.6	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Thallium	<0.58		0.58	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Vanadium	18		0.29	0.084	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1
Zinc	47		1.2	0.36	mg/Kg	☼	12/22/16 14:34	12/28/16 18:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 16:48	1
Boron	0.058 J		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)D

Lab Sample ID: 500-121566-4

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0023	J	0.0050	0.0020	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Lead	0.034		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Manganese	0.32		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:48	1
Zinc	0.036	J	0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:48	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.077		0.0075	0.0075	mg/L	-	12/23/16 14:24	12/28/16 03:35	1
Manganese	0.26		0.025	0.010	mg/L	-	12/23/16 14:24	12/28/16 03:35	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	-	12/22/16 13:48	12/23/16 15:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 15:00	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	-	12/22/16 14:30	12/23/16 11:12	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	☼	12/21/16 14:45	12/22/16 09:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU	-		12/23/16 17:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (0-6)

Lab Sample ID: 500-121566-5

Date Collected: 12/15/16 09:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.2

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	☼	12/16/16 14:45	12/21/16 19:36	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/16/16 14:45	12/21/16 19:36	1
Dibromofluoromethane	110		75 - 120	12/16/16 14:45	12/21/16 19:36	1
1,2-Dichloroethane-d4 (Surr)	110		69 - 134	12/16/16 14:45	12/21/16 19:36	1
Toluene-d8 (Surr)	108		75 - 123	12/16/16 14:45	12/21/16 19:36	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	☼	12/23/16 07:25	12/27/16 15:53	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (0-6)

Lab Sample ID: 500-121566-5

Date Collected: 12/15/16 09:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.2

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	☼	12/23/16 07:25	12/27/16 15:53	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Acenaphthene	0.013	J	0.039	0.0070	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Fluorene	0.012	J	0.039	0.0055	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Phenanthrene	0.16		0.039	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Anthracene	0.032	J	0.039	0.0065	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Fluoranthene	0.27		0.039	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Pyrene	0.28		0.039	0.0078	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Benzo[a]anthracene	0.13		0.039	0.0052	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (0-6)

Lab Sample ID: 500-121566-5

Date Collected: 12/15/16 09:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.12		0.039	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Benzo[b]fluoranthene	0.23		0.039	0.0084	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Benzo[k]fluoranthene	0.069		0.039	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Benzo[a]pyrene	0.16		0.039	0.0076	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Indeno[1,2,3-cd]pyrene	0.056		0.039	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Dibenz(a,h)anthracene	0.023	J	0.039	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Benzo[g,h,i]perylene	0.051		0.039	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 15:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		40 - 130				12/23/16 07:25	12/27/16 15:53	1
Phenol-d5	104		36 - 123				12/23/16 07:25	12/27/16 15:53	1
Nitrobenzene-d5	98		33 - 124				12/23/16 07:25	12/27/16 15:53	1
2-Fluorobiphenyl	91		42 - 115				12/23/16 07:25	12/27/16 15:53	1
2,4,6-Tribromophenol	51		25 - 130				12/23/16 07:25	12/27/16 15:53	1
Terphenyl-d14	134		25 - 150				12/23/16 07:25	12/27/16 15:53	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	☼	12/22/16 14:34	12/28/16 18:51	1
Arsenic	4.6		0.59	0.27	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Barium	70		0.59	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Beryllium	0.52		0.24	0.051	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Boron	1.5	J	2.9	0.41	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Cadmium	0.15		0.12	0.034	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Calcium	5700		12	3.8	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Chromium	13	B	0.59	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Cobalt	7.4		0.29	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Copper	12		0.59	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Iron	14000	B	12	4.5	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Lead	15		0.29	0.15	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Magnesium	2000	B	5.9	2.4	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Manganese	330		0.59	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Nickel	16		0.59	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Potassium	680		29	4.8	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Selenium	0.29	J	0.59	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Silver	<0.29		0.29	0.069	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Sodium	460	B	59	7.8	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Vanadium	19		0.29	0.086	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1
Zinc	98		1.2	0.37	mg/Kg	☼	12/22/16 14:34	12/28/16 18:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 16:53	1
Boron	0.065	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (0-6)

Lab Sample ID: 500-121566-5

Date Collected: 12/15/16 09:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.2

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	-	12/22/16 13:48	12/23/16 16:53	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Manganese	2.2		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 16:53	1
Zinc	0.13	J	0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 16:53	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.16		0.025	0.010	mg/L	-	12/23/16 14:24	12/28/16 03:42	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	-	12/22/16 13:48	12/23/16 15:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 15:04	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	-	12/22/16 14:30	12/23/16 11:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.018	0.0094	mg/Kg	☼	12/21/16 14:45	12/22/16 10:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU	-		12/23/16 17:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Date Collected: 12/15/16 09:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0081	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Bromodichloromethane	<0.0018		0.0018	0.00038	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Carbon tetrachloride	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,1-Dichloroethene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/16/16 14:45	12/21/16 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/16/16 14:45	12/21/16 20:01	1
Dibromofluoromethane	108		75 - 120	12/16/16 14:45	12/21/16 20:01	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/16/16 14:45	12/21/16 20:01	1
Toluene-d8 (Surr)	113		75 - 123	12/16/16 14:45	12/21/16 20:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Date Collected: 12/15/16 09:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.2

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	☼	12/23/16 07:25	12/27/16 13:23	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Date Collected: 12/15/16 09:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.2

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	☼	12/23/16 07:25	12/27/16 13:23	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/23/16 07:25	12/27/16 13:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		40 - 130	12/23/16 07:25	12/27/16 13:23	1
Phenol-d5	109		36 - 123	12/23/16 07:25	12/27/16 13:23	1
Nitrobenzene-d5	98		33 - 124	12/23/16 07:25	12/27/16 13:23	1
2-Fluorobiphenyl	86		42 - 115	12/23/16 07:25	12/27/16 13:23	1
2,4,6-Tribromophenol	80		25 - 130	12/23/16 07:25	12/27/16 13:23	1
Terphenyl-d14	120		25 - 150	12/23/16 07:25	12/27/16 13:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		1.3	0.26	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Arsenic	5.6		0.63	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Barium	64		0.63	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Beryllium	0.50		0.25	0.054	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Boron	1.7 J		3.1	0.44	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Cadmium	0.17		0.13	0.036	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Calcium	13000		13	4.0	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Chromium	14 B		0.63	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Cobalt	8.2		0.31	0.071	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Copper	13		0.63	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Iron	14000 B		13	4.8	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Lead	9.4		0.31	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Magnesium	8100 B		6.3	2.5	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Manganese	330		0.63	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Nickel	22		0.63	0.17	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Potassium	650		31	5.1	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Selenium	<0.63		0.63	0.31	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Silver	<0.31		0.31	0.073	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Sodium	170 B		63	8.3	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Thallium	<0.63		0.63	0.31	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Vanadium	22		0.31	0.091	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	1
Zinc	43		1.3	0.40	mg/Kg	☼	12/22/16 14:34	12/28/16 18:55	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		12/22/16 13:48	12/23/16 16:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 16:58	1
Boron	0.068 J		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 16:58	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Date Collected: 12/15/16 09:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.2

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		12/22/16 13:48	12/23/16 16:58	1
Chromium	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 16:58	1
Cobalt	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 16:58	1
Iron	<0.40		0.40	0.20	mg/L		12/22/16 13:48	12/23/16 16:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/22/16 13:48	12/23/16 16:58	1
Manganese	0.26		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 16:58	1
Nickel	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 16:58	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/16 13:48	12/23/16 16:58	1
Silver	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 16:58	1
Zinc	<0.50		0.50	0.020	mg/L		12/22/16 13:48	12/23/16 16:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.11		0.025	0.010	mg/L		12/23/16 14:24	12/28/16 03:48	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		12/22/16 13:48	12/23/16 15:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/16 13:48	12/23/16 15:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/22/16 14:30	12/23/16 11:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.020	0.011	mg/Kg	☼	12/21/16 14:45	12/22/16 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			12/23/16 17:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (0-6)

Lab Sample ID: 500-121566-7

Date Collected: 12/15/16 09:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/16/16 14:45	12/21/16 20:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 120	12/16/16 14:45	12/21/16 20:27	1
Dibromofluoromethane	110		75 - 120	12/16/16 14:45	12/21/16 20:27	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/16/16 14:45	12/21/16 20:27	1
Toluene-d8 (Surr)	95		75 - 123	12/16/16 14:45	12/21/16 20:27	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	☼	12/23/16 07:25	12/27/16 16:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (0-6)

Lab Sample ID: 500-121566-7

Date Collected: 12/15/16 09:40

Matrix: Solid

Date Received: 12/16/16 09:40

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	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Naphthalene	1.0		0.037	0.0058	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2-Methylnaphthalene	0.50		0.076	0.0069	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Acenaphthylene	0.030 J		0.037	0.0049	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Acenaphthene	2.5		0.037	0.0067	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Dibenzofuran	1.7		0.19	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Bis(2-ethylhexyl) phthalate	0.13 J		0.19	0.069	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		40 - 130	12/23/16 07:25	12/27/16 16:43	1
Phenol-d5	108		36 - 123	12/23/16 07:25	12/27/16 16:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (0-6)

Lab Sample ID: 500-121566-7

Date Collected: 12/15/16 09:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	101		33 - 124	12/23/16 07:25	12/27/16 16:43	1
2-Fluorobiphenyl	91		42 - 115	12/23/16 07:25	12/27/16 16:43	1
2,4,6-Tribromophenol	70		25 - 130	12/23/16 07:25	12/27/16 16:43	1
Terphenyl-d14	174	X	25 - 150	12/23/16 07:25	12/27/16 16:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	2.9		0.75	0.11	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Phenanthrene	26		0.75	0.10	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Anthracene	6.4		0.75	0.13	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Carbazole	3.8		3.8	1.9	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Fluoranthene	34		0.75	0.14	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Pyrene	28		0.75	0.15	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Benzo[a]anthracene	14		0.75	0.10	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Chrysene	15		0.75	0.20	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Benzo[b]fluoranthene	18		0.75	0.16	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Benzo[k]fluoranthene	6.8		0.75	0.22	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Benzo[a]pyrene	13		0.75	0.15	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Indeno[1,2,3-cd]pyrene	6.8		0.75	0.19	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Dibenz(a,h)anthracene	2.1		0.75	0.14	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20
Benzo[g,h,i]perylene	6.5		0.75	0.24	mg/Kg	☼	12/23/16 07:25	12/29/16 11:26	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.24	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Arsenic	5.4		0.57	0.26	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Barium	70		0.57	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Beryllium	0.50		0.23	0.050	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Boron	1.5	J	2.9	0.40	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Cadmium	0.22		0.11	0.033	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Calcium	5800		11	3.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Chromium	13	B	0.57	0.098	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Cobalt	9.6		0.29	0.065	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Copper	11		0.57	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Iron	13000	B	11	4.4	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Lead	30		0.29	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Magnesium	2800	B	5.7	2.3	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Manganese	470		0.57	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Nickel	20		0.57	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Potassium	620		29	4.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Selenium	0.44	J	0.57	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Sodium	350	B	57	7.6	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Vanadium	20		0.29	0.084	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1
Zinc	50		1.1	0.36	mg/Kg	☼	12/22/16 14:34	12/28/16 19:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:02	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (0-6)

Lab Sample ID: 500-121566-7

Date Collected: 12/15/16 09:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:02	1
Boron	0.073	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:02	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/22/16 13:48	12/23/16 17:02	1
Chromium	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:02	1
Cobalt	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:02	1
Iron	<0.40		0.40	0.20	mg/L		12/22/16 13:48	12/23/16 17:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/22/16 13:48	12/23/16 17:02	1
Manganese	0.11		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:02	1
Nickel	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:02	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/16 13:48	12/23/16 17:02	1
Silver	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:02	1
Zinc	<0.50		0.50	0.020	mg/L		12/22/16 13:48	12/23/16 17:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/22/16 13:48	12/23/16 15:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/16 13:48	12/23/16 15:11	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		12/22/16 14:30	12/23/16 11:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.020	0.010	mg/Kg	☼	12/21/16 14:45	12/22/16 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/23/16 17:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (6-12)

Lab Sample ID: 500-121566-8

Date Collected: 12/15/16 09:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

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	☼	12/16/16 14:45	12/22/16 14:48	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	12/16/16 14:45	12/22/16 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/16/16 14:45	12/22/16 14:48	1
Dibromofluoromethane	100		75 - 120	12/16/16 14:45	12/22/16 14:48	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	12/16/16 14:45	12/22/16 14:48	1
Toluene-d8 (Surr)	107		75 - 123	12/16/16 14:45	12/22/16 14:48	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	☼	12/23/16 07:25	12/27/16 13:48	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (6-12)

Lab Sample ID: 500-121566-8

Date Collected: 12/15/16 09:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Phenanthrene	0.043		0.039	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Anthracene	0.011 J		0.039	0.0065	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Fluoranthene	0.052		0.039	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Pyrene	0.051		0.039	0.0077	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Benzo[a]anthracene	0.023 J		0.039	0.0052	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (6-12)

Lab Sample ID: 500-121566-8

Date Collected: 12/15/16 09:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

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	☼	12/23/16 07:25	12/27/16 13:48	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Benzo[b]fluoranthene	0.034	J	0.039	0.0084	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Benzo[k]fluoranthene	0.016	J	0.039	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Benzo[a]pyrene	0.024	J	0.039	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Indeno[1,2,3-cd]pyrene	0.013	J	0.039	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		40 - 130	12/23/16 07:25	12/27/16 13:48	1
Phenol-d5	105		36 - 123	12/23/16 07:25	12/27/16 13:48	1
Nitrobenzene-d5	97		33 - 124	12/23/16 07:25	12/27/16 13:48	1
2-Fluorobiphenyl	86		42 - 115	12/23/16 07:25	12/27/16 13:48	1
2,4,6-Tribromophenol	77		25 - 130	12/23/16 07:25	12/27/16 13:48	1
Terphenyl-d14	128		25 - 150	12/23/16 07:25	12/27/16 13:48	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	☼	12/22/16 14:34	12/28/16 19:04	1
Arsenic	5.5		0.58	0.27	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Barium	70		0.58	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Beryllium	0.44		0.23	0.051	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Boron	1.6	J	2.9	0.41	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Cadmium	0.18		0.12	0.034	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Calcium	13000		12	3.8	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Chromium	12	B	0.58	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Cobalt	9.2		0.29	0.066	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Copper	12		0.58	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Iron	13000	B	12	4.5	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Lead	10		0.29	0.15	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Magnesium	8400	B	5.8	2.4	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Manganese	490		0.58	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Nickel	20		0.58	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Potassium	540		29	4.8	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Selenium	0.49	J	0.58	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Sodium	250	B	58	7.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Vanadium	20		0.29	0.085	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	1
Zinc	39		1.2	0.37	mg/Kg	☼	12/22/16 14:34	12/28/16 19:04	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		12/22/16 13:48	12/23/16 17:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:07	1
Boron	0.067	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:07	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (6-12)

Lab Sample ID: 500-121566-8

Date Collected: 12/15/16 09:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

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	-	12/22/16 13:48	12/23/16 17:07	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Manganese	0.13		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:07	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 13:48	12/23/16 15:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 15:14	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	-	12/22/16 14:30	12/23/16 11:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018	0.0093	mg/Kg	☼	12/21/16 14:45	12/22/16 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU	-		12/23/16 17:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (0-6)

Lab Sample ID: 500-121566-9

Date Collected: 12/15/16 10:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.5

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	☼	12/16/16 14:45	12/22/16 15:13	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/16/16 14:45	12/22/16 15:13	1
Dibromofluoromethane	108		75 - 120	12/16/16 14:45	12/22/16 15:13	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	12/16/16 14:45	12/22/16 15:13	1
Toluene-d8 (Surr)	115		75 - 123	12/16/16 14:45	12/22/16 15:13	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	☼	12/23/16 07:25	12/27/16 14:13	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (0-6)

Lab Sample ID: 500-121566-9

Date Collected: 12/15/16 10:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Phenanthrene	0.0080	J	0.040	0.0056	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Fluoranthene	0.015	J	0.040	0.0074	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Pyrene	0.017	J	0.040	0.0079	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Benzo[a]anthracene	0.0094	J	0.040	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (0-6)

Lab Sample ID: 500-121566-9

Date Collected: 12/15/16 10:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.5

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	☼	12/23/16 07:25	12/27/16 14:13	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Benzo[a]pyrene	0.0089	J	0.040	0.0077	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	113		40 - 130	12/23/16 07:25	12/27/16 14:13	1
Phenol-d5	122		36 - 123	12/23/16 07:25	12/27/16 14:13	1
Nitrobenzene-d5	108		33 - 124	12/23/16 07:25	12/27/16 14:13	1
2-Fluorobiphenyl	100		42 - 115	12/23/16 07:25	12/27/16 14:13	1
2,4,6-Tribromophenol	84		25 - 130	12/23/16 07:25	12/27/16 14:13	1
Terphenyl-d14	136		25 - 150	12/23/16 07:25	12/27/16 14:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.2	0.25	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Arsenic	5.9		0.61	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Barium	83		0.61	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Beryllium	0.53		0.24	0.053	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Boron	2.0	J	3.0	0.42	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Cadmium	0.21		0.12	0.035	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Calcium	14000		12	3.9	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Chromium	13	B	0.61	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Cobalt	9.8		0.30	0.069	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Copper	12		0.61	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Iron	14000	B	12	4.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Lead	24		0.30	0.15	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Magnesium	2600	B	6.1	2.5	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Manganese	590		0.61	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Nickel	19		0.61	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Potassium	700		30	5.0	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Selenium	<0.61		0.61	0.30	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Sodium	290	B	61	8.0	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Vanadium	21		0.30	0.089	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1
Zinc	62		1.2	0.38	mg/Kg	☼	12/22/16 14:34	12/28/16 19:09	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:12	1
Boron	0.064	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:12	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (0-6)

Lab Sample ID: 500-121566-9

Date Collected: 12/15/16 10:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.5

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	-	12/22/16 13:48	12/23/16 17:12	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Manganese	4.1		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:12	1
Zinc	0.045	J	0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:12	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	-	12/23/16 14:24	12/28/16 04:09	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	-	12/22/16 13:48	12/23/16 15:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 15:24	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	-	12/22/16 14:30	12/23/16 11:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.019	0.0099	mg/Kg	☼	12/21/16 14:45	12/22/16 10:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/23/16 17:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Date Collected: 12/15/16 10:20

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0081	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Bromodichloromethane	<0.0018		0.0018	0.00038	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Carbon tetrachloride	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,1-Dichloroethene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 120	12/16/16 14:45	12/22/16 15:39	1
Dibromofluoromethane	101		75 - 120	12/16/16 14:45	12/22/16 15:39	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/16/16 14:45	12/22/16 15:39	1
Toluene-d8 (Surr)	111		75 - 123	12/16/16 14:45	12/22/16 15:39	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	☼	12/23/16 07:25	12/27/16 14:38	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Date Collected: 12/15/16 10:20

Matrix: Solid

Date Received: 12/16/16 09:40

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	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Date Collected: 12/15/16 10:20

Matrix: Solid

Date Received: 12/16/16 09:40

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	☼	12/23/16 07:25	12/27/16 14:38	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 14:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	110		40 - 130	12/23/16 07:25	12/27/16 14:38	1
Phenol-d5	113		36 - 123	12/23/16 07:25	12/27/16 14:38	1
Nitrobenzene-d5	106		33 - 124	12/23/16 07:25	12/27/16 14:38	1
2-Fluorobiphenyl	96		42 - 115	12/23/16 07:25	12/27/16 14:38	1
2,4,6-Tribromophenol	75		25 - 130	12/23/16 07:25	12/27/16 14:38	1
Terphenyl-d14	126		25 - 150	12/23/16 07:25	12/27/16 14:38	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	☼	12/22/16 14:34	12/28/16 19:13	1
Arsenic	5.1		0.60	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Barium	69		0.60	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Beryllium	0.49		0.24	0.052	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Boron	2.0	J	3.0	0.42	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Cadmium	0.13		0.12	0.035	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Calcium	15000		12	3.8	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Chromium	14	B	0.60	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Cobalt	7.0		0.30	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Copper	12		0.60	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Iron	14000	B	12	4.6	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Lead	8.7		0.30	0.15	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Magnesium	10000	B	6.0	2.4	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Manganese	340		0.60	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Nickel	18		0.60	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Potassium	690		30	4.9	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Selenium	0.40	J	0.60	0.30	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Sodium	170	B	60	7.9	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Thallium	<0.60		0.60	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Vanadium	21		0.30	0.087	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1
Zinc	45		1.2	0.38	mg/Kg	☼	12/22/16 14:34	12/28/16 19:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.52		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:17	1
Boron	0.071	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:17	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Date Collected: 12/15/16 10:20

Matrix: Solid

Date Received: 12/16/16 09:40

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		12/22/16 13:48	12/23/16 17:17	1
Chromium	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:17	1
Cobalt	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:17	1
Iron	<0.40		0.40	0.20	mg/L		12/22/16 13:48	12/23/16 17:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/22/16 13:48	12/23/16 17:17	1
Manganese	0.21		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:17	1
Nickel	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:17	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/16 13:48	12/23/16 17:17	1
Silver	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:17	1
Zinc	<0.50		0.50	0.020	mg/L		12/22/16 13:48	12/23/16 17:17	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.25		0.025	0.010	mg/L		12/23/16 14:24	12/28/16 04:15	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		12/22/16 13:48	12/23/16 15:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/16 13:48	12/23/16 15:28	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/22/16 14:30	12/23/16 11:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.020	0.011	mg/Kg	☼	12/21/16 14:45	12/22/16 10:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/23/16 17:55	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (0-6)

Lab Sample ID: 500-121566-11

Date Collected: 12/15/16 10:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.3

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	☼	12/16/16 14:45	12/22/16 16:04	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/16/16 14:45	12/22/16 16:04	1
Dibromofluoromethane	111		75 - 120	12/16/16 14:45	12/22/16 16:04	1
1,2-Dichloroethane-d4 (Surr)	112		69 - 134	12/16/16 14:45	12/22/16 16:04	1
Toluene-d8 (Surr)	107		75 - 123	12/16/16 14:45	12/22/16 16:04	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	☼	12/23/16 07:25	12/28/16 20:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (0-6)

Lab Sample ID: 500-121566-11

Date Collected: 12/15/16 10:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.3

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	☼	12/23/16 07:25	12/28/16 20:15	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Naphthalene	0.011	J	0.038	0.0060	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2-Methylnaphthalene	0.0097	J	0.078	0.0071	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Acenaphthylene	0.0098	J	0.038	0.0051	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Acenaphthene	0.014	J	0.038	0.0070	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Fluorene	0.011	J	0.038	0.0054	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Phenanthrene	0.18		0.038	0.0054	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Anthracene	0.033	J	0.038	0.0065	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Fluoranthene	0.36		0.038	0.0072	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Pyrene	0.62		0.038	0.0077	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Benzo[a]anthracene	0.20		0.038	0.0052	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (0-6)

Lab Sample ID: 500-121566-11

Date Collected: 12/15/16 10:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.22		0.038	0.011	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Bis(2-ethylhexyl) phthalate	0.12	J	0.19	0.071	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Benzo[b]fluoranthene	0.36		0.038	0.0084	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Benzo[k]fluoranthene	0.12		0.038	0.011	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Benzo[a]pyrene	0.20		0.038	0.0075	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Indeno[1,2,3-cd]pyrene	0.11		0.038	0.010	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
Benzo[g,h,i]perylene	0.12		0.038	0.012	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	12/23/16 07:25	12/28/16 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/23/16 07:25	12/28/16 20:15	1
Phenol-d5	67		36 - 123	12/23/16 07:25	12/28/16 20:15	1
Nitrobenzene-d5	91		33 - 124	12/23/16 07:25	12/28/16 20:15	1
2-Fluorobiphenyl	86		42 - 115	12/23/16 07:25	12/28/16 20:15	1
2,4,6-Tribromophenol	31		25 - 130	12/23/16 07:25	12/28/16 20:15	1
Terphenyl-d14	160	X	25 - 150	12/23/16 07:25	12/28/16 20:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41	J	1.2	0.24	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Arsenic	6.8		0.58	0.27	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Barium	140		0.58	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Beryllium	0.50		0.23	0.050	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Boron	2.5	J	2.9	0.40	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Cadmium	2.9		0.12	0.033	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Calcium	16000		12	3.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Chromium	13	B	0.58	0.099	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Cobalt	7.5		0.29	0.065	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Copper	18		0.58	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Iron	14000	B	12	4.4	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Lead	890		0.29	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Magnesium	7600	B	5.8	2.3	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Manganese	380		0.58	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Nickel	17		0.58	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Potassium	640		29	4.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Selenium	0.42	J	0.58	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Sodium	630	B	58	7.6	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Thallium	<0.58		0.58	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Vanadium	19		0.29	0.084	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	1
Zinc	420		1.2	0.36	mg/Kg	☼	12/22/16 14:34	12/28/16 19:17	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		12/22/16 13:48	12/23/16 17:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:21	1
Boron	0.071	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:21	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (0-6)

Lab Sample ID: 500-121566-11

Date Collected: 12/15/16 10:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.038		0.0050	0.0020	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Lead	1.7		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Manganese	0.48		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Nickel	0.017	J	0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:21	1
Zinc	3.1		0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:21	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0039	J	0.0050	0.0020	mg/L	-	12/23/16 14:24	12/28/16 04:22	1
Lead	3.7		0.0075	0.0075	mg/L	-	12/23/16 14:24	12/28/16 04:22	1
Manganese	0.49		0.025	0.010	mg/L	-	12/23/16 14:24	12/28/16 04:22	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	-	12/22/16 13:48	12/23/16 15:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 15:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/22/16 14:30	12/23/16 11:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.017	0.0091	mg/Kg	☼	12/21/16 14:45	12/22/16 10:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU	-		12/27/16 11:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (6-12)

Lab Sample ID: 500-121566-12

Date Collected: 12/15/16 11:00

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

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	☼	12/16/16 14:45	12/22/16 16:30	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/16/16 14:45	12/22/16 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/16/16 14:45	12/22/16 16:30	1
Dibromofluoromethane	107		75 - 120	12/16/16 14:45	12/22/16 16:30	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	12/16/16 14:45	12/22/16 16:30	1
Toluene-d8 (Surr)	105		75 - 123	12/16/16 14:45	12/22/16 16:30	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	☼	12/23/16 07:25	12/27/16 15:42	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (6-12)

Lab Sample ID: 500-121566-12

Date Collected: 12/15/16 11:00

Matrix: Solid

Date Received: 12/16/16 09:40

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	<0.21		0.21	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (6-12)

Lab Sample ID: 500-121566-12

Date Collected: 12/15/16 11:00

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/23/16 07:25	12/27/16 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/23/16 07:25	12/27/16 15:42	1
Phenol-d5	97		36 - 123	12/23/16 07:25	12/27/16 15:42	1
Nitrobenzene-d5	83		33 - 124	12/23/16 07:25	12/27/16 15:42	1
2-Fluorobiphenyl	81		42 - 115	12/23/16 07:25	12/27/16 15:42	1
2,4,6-Tribromophenol	72		25 - 130	12/23/16 07:25	12/27/16 15:42	1
Terphenyl-d14	95		25 - 150	12/23/16 07:25	12/27/16 15:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.2	0.25	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Arsenic	6.3		0.60	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Barium	64		0.60	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Beryllium	0.45		0.24	0.052	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Boron	1.7	J	3.0	0.42	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Cadmium	0.16		0.12	0.035	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Calcium	19000		12	3.8	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Chromium	12	B	0.60	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Cobalt	7.0		0.30	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Copper	11		0.60	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Iron	13000	B	12	4.6	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Lead	10		0.30	0.15	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Magnesium	12000	B	6.0	2.4	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Manganese	370		0.60	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Nickel	19		0.60	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Potassium	610		30	4.9	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Selenium	<0.60		0.60	0.30	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Sodium	260	B	60	7.9	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Thallium	<0.60		0.60	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Vanadium	20		0.30	0.087	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1
Zinc	37		1.2	0.38	mg/Kg	☼	12/22/16 14:34	12/28/16 19:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:26	1
Boron	0.054	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:26	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (6-12)

Lab Sample ID: 500-121566-12

Date Collected: 12/15/16 11:00

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

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	-	12/22/16 13:48	12/23/16 17:26	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Cobalt	0.019	J	0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Manganese	2.9		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Nickel	0.046		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:26	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:26	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	-	12/23/16 14:24	12/28/16 04:45	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/22/16 13:48	12/23/16 15:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 15:34	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	-	12/22/16 14:30	12/23/16 11:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.010	mg/Kg	☼	12/21/16 14:45	12/22/16 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/27/16 12:06	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (0-6)

Lab Sample ID: 500-121566-13

Date Collected: 12/15/16 11:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.0

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	☼	12/16/16 14:45	12/22/16 16:55	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/16/16 14:45	12/22/16 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/16/16 14:45	12/22/16 16:55	1
Dibromofluoromethane	110		75 - 120	12/16/16 14:45	12/22/16 16:55	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/16/16 14:45	12/22/16 16:55	1
Toluene-d8 (Surr)	108		75 - 123	12/16/16 14:45	12/22/16 16:55	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	☼	12/23/16 07:25	12/27/16 16:11	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (0-6)

Lab Sample ID: 500-121566-13

Date Collected: 12/15/16 11:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.0

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	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (0-6)

Lab Sample ID: 500-121566-13

Date Collected: 12/15/16 11:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.0

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	☼	12/23/16 07:25	12/27/16 16:11	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/23/16 07:25	12/27/16 16:11	1
Phenol-d5	91		36 - 123	12/23/16 07:25	12/27/16 16:11	1
Nitrobenzene-d5	90		33 - 124	12/23/16 07:25	12/27/16 16:11	1
2-Fluorobiphenyl	81		42 - 115	12/23/16 07:25	12/27/16 16:11	1
2,4,6-Tribromophenol	55		25 - 130	12/23/16 07:25	12/27/16 16:11	1
Terphenyl-d14	90		25 - 150	12/23/16 07:25	12/27/16 16:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.2	0.24	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Arsenic	5.5		0.58	0.27	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Barium	65		0.58	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Beryllium	0.54		0.23	0.050	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Boron	1.4	J	2.9	0.40	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Cadmium	0.13		0.12	0.033	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Calcium	29000		12	3.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Chromium	13	B	0.58	0.099	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Cobalt	9.0		0.29	0.065	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Copper	14		0.58	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Iron	14000	B	12	4.5	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Lead	15		0.29	0.14	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Magnesium	2100	B	5.8	2.3	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Manganese	390		0.58	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Nickel	20		0.58	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Potassium	710		29	4.7	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Selenium	<0.58		0.58	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Sodium	95	B	58	7.6	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Thallium	<0.58		0.58	0.28	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Vanadium	21		0.29	0.084	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1
Zinc	47		1.2	0.37	mg/Kg	☼	12/22/16 14:34	12/28/16 19:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:31	1
Boron	0.056	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:31	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (0-6)

Lab Sample ID: 500-121566-13

Date Collected: 12/15/16 11:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.0

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		12/22/16 13:48	12/23/16 17:31	1
Chromium	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:31	1
Cobalt	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:31	1
Iron	<0.40		0.40	0.20	mg/L		12/22/16 13:48	12/23/16 17:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/22/16 13:48	12/23/16 17:31	1
Manganese	0.43		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:31	1
Nickel	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:31	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/16 13:48	12/23/16 17:31	1
Silver	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 17:31	1
Zinc	<0.50		0.50	0.020	mg/L		12/22/16 13:48	12/23/16 17:31	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.22		0.025	0.010	mg/L		12/23/16 14:24	12/28/16 04:52	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		12/22/16 13:48	12/23/16 15:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/16 13:48	12/23/16 15:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/22/16 14:30	12/23/16 11:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.020	0.011	mg/Kg	☼	12/21/16 14:45	12/22/16 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/27/16 12:15	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Date Collected: 12/15/16 11:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Vinyl acetate	<0.0045		0.0045	0.0015	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/16/16 14:45	12/22/16 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/16/16 14:45	12/22/16 17:20	1
Dibromofluoromethane	105		75 - 120	12/16/16 14:45	12/22/16 17:20	1
1,2-Dichloroethane-d4 (Surr)	95		69 - 134	12/16/16 14:45	12/22/16 17:20	1
Toluene-d8 (Surr)	106		75 - 123	12/16/16 14:45	12/22/16 17:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Date Collected: 12/15/16 11:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Date Collected: 12/15/16 11:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/23/16 07:25	12/27/16 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/23/16 07:25	12/27/16 16:40	1
Phenol-d5	91		36 - 123	12/23/16 07:25	12/27/16 16:40	1
Nitrobenzene-d5	86		33 - 124	12/23/16 07:25	12/27/16 16:40	1
2-Fluorobiphenyl	86		42 - 115	12/23/16 07:25	12/27/16 16:40	1
2,4,6-Tribromophenol	69		25 - 130	12/23/16 07:25	12/27/16 16:40	1
Terphenyl-d14	95		25 - 150	12/23/16 07:25	12/27/16 16:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.2	0.25	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Arsenic	4.9		0.59	0.27	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Barium	47		0.59	0.11	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Beryllium	0.44		0.24	0.051	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Boron	2.0	J	3.0	0.41	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Cadmium	0.10	J	0.12	0.034	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Calcium	20000		12	3.8	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Chromium	12	B	0.59	0.10	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Cobalt	6.5		0.30	0.067	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Copper	12		0.59	0.13	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Iron	12000	B	12	4.6	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Lead	8.3		0.30	0.15	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Magnesium	12000	B	5.9	2.4	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Manganese	240		0.59	0.12	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Nickel	15		0.59	0.16	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Potassium	520		30	4.8	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Selenium	<0.59		0.59	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Silver	<0.30		0.30	0.069	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Sodium	96	B	59	7.8	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Vanadium	20		0.30	0.087	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	1
Zinc	34		1.2	0.38	mg/Kg	☼	12/22/16 14:34	12/28/16 19:31	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		12/22/16 13:48	12/23/16 17:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 17:43	1
Boron	0.084	J	0.50	0.050	mg/L		12/22/16 13:48	12/23/16 17:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Date Collected: 12/15/16 11:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.3

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	-	12/22/16 13:48	12/23/16 17:43	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Iron	<0.40		0.40	0.20	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Manganese	0.26		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Silver	<0.025		0.025	0.010	mg/L	-	12/22/16 13:48	12/23/16 17:43	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/22/16 13:48	12/23/16 17:43	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.076		0.025	0.010	mg/L	-	12/23/16 14:24	12/28/16 04:58	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	-	12/22/16 13:48	12/23/16 15:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/22/16 13:48	12/23/16 15:41	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	-	12/22/16 14:30	12/23/16 11:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.021	0.011	mg/Kg	☼	12/21/16 14:45	12/22/16 10:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU	-		12/27/16 12:23	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
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.
B	Compound was found in the blank and sample.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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: 500-121566-1

GC/MS VOA

Prep Batch: 365654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	5035	
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	5035	
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	5035	
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	5035	
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	5035	
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	5035	
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	5035	
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	5035	
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	5035	
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	5035	
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	5035	
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	5035	
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	5035	
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	5035	

Analysis Batch: 366061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	8260B	365654
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	8260B	365654
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	8260B	365654
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	8260B	365654
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	8260B	365654
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	8260B	365654
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	8260B	365654
MB 500-366061/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-366061/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-366061/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 366259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	8260B	365654
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	8260B	365654
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	8260B	365654
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	8260B	365654
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	8260B	365654
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	8260B	365654
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	8260B	365654
MB 500-366259/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-366259/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-366259/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 366455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	3541	
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	3541	
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	3541	
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	3541	
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	3541	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

GC/MS Semi VOA (Continued)

Prep Batch: 366455 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	3541	
500-121566-7 - DL	1314V3-33-B03 (0-6)	Total/NA	Solid	3541	
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	3541	
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	3541	
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	3541	
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	3541	
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	3541	
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	3541	
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	3541	
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	3541	
MB 500-366455/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-366455/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-121566-1 MS	1314V3-33-B02 (0-5)	Total/NA	Solid	3541	
500-121566-1 MSD	1314V3-33-B02 (0-5)	Total/NA	Solid	3541	

Analysis Batch: 366664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	8270D	366455
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	8270D	366455
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	8270D	366455
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	8270D	366455
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	8270D	366455
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	8270D	366455
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	8270D	366455
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	8270D	366455
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	8270D	366455
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	8270D	366455
500-121566-1 MS	1314V3-33-B02 (0-5)	Total/NA	Solid	8270D	366455
500-121566-1 MSD	1314V3-33-B02 (0-5)	Total/NA	Solid	8270D	366455

Analysis Batch: 366695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	8270D	366455
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	8270D	366455
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	8270D	366455
MB 500-366455/1-A	Method Blank	Total/NA	Solid	8270D	366455
LCS 500-366455/2-A	Lab Control Sample	Total/NA	Solid	8270D	366455

Analysis Batch: 366869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	8270D	366455

Analysis Batch: 367001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-7 - DL	1314V3-33-B03 (0-6)	Total/NA	Solid	8270D	366455

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Metals

Prep Batch: 366137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	7471B	
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	7471B	
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	7471B	
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	7471B	
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	7471B	
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	7471B	
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	7471B	
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	7471B	
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	7471B	
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	7471B	
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	7471B	
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	7471B	
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	7471B	
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	7471B	
MB 500-366137/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-366137/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Leach Batch: 366180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	TCLP	Solid	1311	
500-121566-2	1314V3-33-B02 (5-9.4)	TCLP	Solid	1311	
500-121566-3	1314V3-33-B07 (0-8)	TCLP	Solid	1311	
500-121566-4	1314V3-33-B07 (0-8)D	TCLP	Solid	1311	
500-121566-5	1314V3-33-B01 (0-6)	TCLP	Solid	1311	
500-121566-6	1314V3-33-B01 (6-12)	TCLP	Solid	1311	
500-121566-7	1314V3-33-B03 (0-6)	TCLP	Solid	1311	
500-121566-8	1314V3-33-B03 (6-12)	TCLP	Solid	1311	
500-121566-9	1314V3-33-B05 (0-6)	TCLP	Solid	1311	
500-121566-10	1314V3-33-B05 (6-12)	TCLP	Solid	1311	
500-121566-11	1314V3-33-B04 (0-6)	TCLP	Solid	1311	
500-121566-12	1314V3-33-B04 (6-12)	TCLP	Solid	1311	
500-121566-13	1314V3-33-B06 (0-6)	TCLP	Solid	1311	
500-121566-14	1314V3-33-B06 (6-12)	TCLP	Solid	1311	
LB 500-366180/1-B	Method Blank	TCLP	Solid	1311	
LB 500-366180/1-C	Method Blank	TCLP	Solid	1311	
LB 500-366180/1-D	Method Blank	TCLP	Solid	1311	
500-121566-1 MS	1314V3-33-B02 (0-5)	TCLP	Solid	1311	
500-121566-14 MS	1314V3-33-B06 (6-12)	TCLP	Solid	1311	
500-121566-1 DU	1314V3-33-B02 (0-5)	TCLP	Solid	1311	
500-121566-14 DU	1314V3-33-B06 (6-12)	TCLP	Solid	1311	

Leach Batch: 366333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	SPLP East	Solid	1312	
500-121566-2	1314V3-33-B02 (5-9.4)	SPLP East	Solid	1312	
500-121566-3	1314V3-33-B07 (0-8)	SPLP East	Solid	1312	
500-121566-4	1314V3-33-B07 (0-8)D	SPLP East	Solid	1312	
500-121566-5	1314V3-33-B01 (0-6)	SPLP East	Solid	1312	
500-121566-6	1314V3-33-B01 (6-12)	SPLP East	Solid	1312	
500-121566-9	1314V3-33-B05 (0-6)	SPLP East	Solid	1312	
500-121566-10	1314V3-33-B05 (6-12)	SPLP East	Solid	1312	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Metals (Continued)

Leach Batch: 366333 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-11	1314V3-33-B04 (0-6)	SPLP East	Solid	1312	
500-121566-12	1314V3-33-B04 (6-12)	SPLP East	Solid	1312	
500-121566-13	1314V3-33-B06 (0-6)	SPLP East	Solid	1312	
500-121566-14	1314V3-33-B06 (6-12)	SPLP East	Solid	1312	
LB 500-366333/1-B	Method Blank	SPLP East	Solid	1312	
500-121566-14 MS	1314V3-33-B06 (6-12)	SPLP East	Solid	1312	
500-121566-14 DU	1314V3-33-B06 (6-12)	SPLP East	Solid	1312	

Analysis Batch: 366345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	7471B	366137
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	7471B	366137
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	7471B	366137
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	7471B	366137
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	7471B	366137
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	7471B	366137
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	7471B	366137
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	7471B	366137
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	7471B	366137
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	7471B	366137
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	7471B	366137
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	7471B	366137
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	7471B	366137
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	7471B	366137
MB 500-366137/12-A	Method Blank	Total/NA	Solid	7471B	366137
LCS 500-366137/13-A	Lab Control Sample	Total/NA	Solid	7471B	366137

Prep Batch: 366353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	TCLP	Solid	7470A	366180
500-121566-2	1314V3-33-B02 (5-9.4)	TCLP	Solid	7470A	366180
500-121566-3	1314V3-33-B07 (0-8)	TCLP	Solid	7470A	366180
500-121566-4	1314V3-33-B07 (0-8)D	TCLP	Solid	7470A	366180
500-121566-5	1314V3-33-B01 (0-6)	TCLP	Solid	7470A	366180
500-121566-6	1314V3-33-B01 (6-12)	TCLP	Solid	7470A	366180
500-121566-7	1314V3-33-B03 (0-6)	TCLP	Solid	7470A	366180
500-121566-8	1314V3-33-B03 (6-12)	TCLP	Solid	7470A	366180
500-121566-9	1314V3-33-B05 (0-6)	TCLP	Solid	7470A	366180
500-121566-10	1314V3-33-B05 (6-12)	TCLP	Solid	7470A	366180
500-121566-11	1314V3-33-B04 (0-6)	TCLP	Solid	7470A	366180
500-121566-12	1314V3-33-B04 (6-12)	TCLP	Solid	7470A	366180
500-121566-13	1314V3-33-B06 (0-6)	TCLP	Solid	7470A	366180
500-121566-14	1314V3-33-B06 (6-12)	TCLP	Solid	7470A	366180
LB 500-366180/1-B	Method Blank	TCLP	Solid	7470A	366180
MB 500-366353/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-366353/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-121566-1 MS	1314V3-33-B02 (0-5)	TCLP	Solid	7470A	366180
500-121566-1 DU	1314V3-33-B02 (0-5)	TCLP	Solid	7470A	366180

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Metals (Continued)

Prep Batch: 366368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	TCLP	Solid	3010A	366180
500-121566-2	1314V3-33-B02 (5-9.4)	TCLP	Solid	3010A	366180
500-121566-3	1314V3-33-B07 (0-8)	TCLP	Solid	3010A	366180
500-121566-4	1314V3-33-B07 (0-8)D	TCLP	Solid	3010A	366180
500-121566-5	1314V3-33-B01 (0-6)	TCLP	Solid	3010A	366180
500-121566-6	1314V3-33-B01 (6-12)	TCLP	Solid	3010A	366180
500-121566-7	1314V3-33-B03 (0-6)	TCLP	Solid	3010A	366180
500-121566-8	1314V3-33-B03 (6-12)	TCLP	Solid	3010A	366180
500-121566-9	1314V3-33-B05 (0-6)	TCLP	Solid	3010A	366180
500-121566-10	1314V3-33-B05 (6-12)	TCLP	Solid	3010A	366180
500-121566-11	1314V3-33-B04 (0-6)	TCLP	Solid	3010A	366180
500-121566-12	1314V3-33-B04 (6-12)	TCLP	Solid	3010A	366180
500-121566-13	1314V3-33-B06 (0-6)	TCLP	Solid	3010A	366180
500-121566-14	1314V3-33-B06 (6-12)	TCLP	Solid	3010A	366180
LB 500-366180/1-C	Method Blank	TCLP	Solid	3010A	366180
LB 500-366180/1-D	Method Blank	TCLP	Solid	3010A	366180
LCS 500-366368/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-121566-14 MS	1314V3-33-B06 (6-12)	TCLP	Solid	3010A	366180
500-121566-14 DU	1314V3-33-B06 (6-12)	TCLP	Solid	3010A	366180

Prep Batch: 366379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	3050B	
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	3050B	
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	3050B	
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	3050B	
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	3050B	
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	3050B	
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	3050B	
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	3050B	
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	3050B	
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	3050B	
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	3050B	
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	3050B	
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	3050B	
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	3050B	
MB 500-366379/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-366379/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-121566-1 MS	1314V3-33-B02 (0-5)	Total/NA	Solid	3050B	
500-121566-1 MSD	1314V3-33-B02 (0-5)	Total/NA	Solid	3050B	
500-121566-1 DU	1314V3-33-B02 (0-5)	Total/NA	Solid	3050B	

Analysis Batch: 366539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	TCLP	Solid	7470A	366353
500-121566-2	1314V3-33-B02 (5-9.4)	TCLP	Solid	7470A	366353
500-121566-3	1314V3-33-B07 (0-8)	TCLP	Solid	7470A	366353
500-121566-4	1314V3-33-B07 (0-8)D	TCLP	Solid	7470A	366353
500-121566-5	1314V3-33-B01 (0-6)	TCLP	Solid	7470A	366353
500-121566-6	1314V3-33-B01 (6-12)	TCLP	Solid	7470A	366353
500-121566-7	1314V3-33-B03 (0-6)	TCLP	Solid	7470A	366353

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Metals (Continued)

Analysis Batch: 366539 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-8	1314V3-33-B03 (6-12)	TCLP	Solid	7470A	366353
500-121566-9	1314V3-33-B05 (0-6)	TCLP	Solid	7470A	366353
500-121566-10	1314V3-33-B05 (6-12)	TCLP	Solid	7470A	366353
500-121566-11	1314V3-33-B04 (0-6)	TCLP	Solid	7470A	366353
500-121566-12	1314V3-33-B04 (6-12)	TCLP	Solid	7470A	366353
500-121566-13	1314V3-33-B06 (0-6)	TCLP	Solid	7470A	366353
500-121566-14	1314V3-33-B06 (6-12)	TCLP	Solid	7470A	366353
LB 500-366180/1-B	Method Blank	TCLP	Solid	7470A	366353
MB 500-366353/12-A	Method Blank	Total/NA	Solid	7470A	366353
LCS 500-366353/13-A	Lab Control Sample	Total/NA	Solid	7470A	366353
500-121566-1 MS	1314V3-33-B02 (0-5)	TCLP	Solid	7470A	366353
500-121566-1 DU	1314V3-33-B02 (0-5)	TCLP	Solid	7470A	366353

Prep Batch: 366571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	SPLP East	Solid	3010A	366333
500-121566-2	1314V3-33-B02 (5-9.4)	SPLP East	Solid	3010A	366333
500-121566-3	1314V3-33-B07 (0-8)	SPLP East	Solid	3010A	366333
500-121566-4	1314V3-33-B07 (0-8)D	SPLP East	Solid	3010A	366333
500-121566-5	1314V3-33-B01 (0-6)	SPLP East	Solid	3010A	366333
500-121566-6	1314V3-33-B01 (6-12)	SPLP East	Solid	3010A	366333
500-121566-9	1314V3-33-B05 (0-6)	SPLP East	Solid	3010A	366333
500-121566-10	1314V3-33-B05 (6-12)	SPLP East	Solid	3010A	366333
500-121566-11	1314V3-33-B04 (0-6)	SPLP East	Solid	3010A	366333
500-121566-12	1314V3-33-B04 (6-12)	SPLP East	Solid	3010A	366333
500-121566-13	1314V3-33-B06 (0-6)	SPLP East	Solid	3010A	366333
500-121566-14	1314V3-33-B06 (6-12)	SPLP East	Solid	3010A	366333
LB 500-366333/1-B	Method Blank	SPLP East	Solid	3010A	366333
LCS 500-366571/2-A	Lab Control Sample	Total/NA	Solid	3010A	366333
500-121566-14 MS	1314V3-33-B06 (6-12)	SPLP East	Solid	3010A	366333
500-121566-14 DU	1314V3-33-B06 (6-12)	SPLP East	Solid	3010A	366333

Analysis Batch: 366689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	TCLP	Solid	6020A	366368
500-121566-2	1314V3-33-B02 (5-9.4)	TCLP	Solid	6020A	366368
500-121566-3	1314V3-33-B07 (0-8)	TCLP	Solid	6020A	366368
500-121566-4	1314V3-33-B07 (0-8)D	TCLP	Solid	6020A	366368
500-121566-5	1314V3-33-B01 (0-6)	TCLP	Solid	6020A	366368
500-121566-6	1314V3-33-B01 (6-12)	TCLP	Solid	6020A	366368
500-121566-7	1314V3-33-B03 (0-6)	TCLP	Solid	6020A	366368
500-121566-8	1314V3-33-B03 (6-12)	TCLP	Solid	6020A	366368
500-121566-9	1314V3-33-B05 (0-6)	TCLP	Solid	6020A	366368
500-121566-10	1314V3-33-B05 (6-12)	TCLP	Solid	6020A	366368
500-121566-11	1314V3-33-B04 (0-6)	TCLP	Solid	6020A	366368
500-121566-12	1314V3-33-B04 (6-12)	TCLP	Solid	6020A	366368
500-121566-13	1314V3-33-B06 (0-6)	TCLP	Solid	6020A	366368
500-121566-14	1314V3-33-B06 (6-12)	TCLP	Solid	6020A	366368
LB 500-366180/1-C	Method Blank	TCLP	Solid	6020A	366368
LCS 500-366368/2-A	Lab Control Sample	Total/NA	Solid	6020A	366368
500-121566-14 MS	1314V3-33-B06 (6-12)	TCLP	Solid	6020A	366368

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Metals (Continued)

Analysis Batch: 366689 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-14 DU	1314V3-33-B06 (6-12)	TCLP	Solid	6020A	366368

Analysis Batch: 366692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	TCLP	Solid	6010B	366368
500-121566-2	1314V3-33-B02 (5-9.4)	TCLP	Solid	6010B	366368
500-121566-3	1314V3-33-B07 (0-8)	TCLP	Solid	6010B	366368
500-121566-4	1314V3-33-B07 (0-8)D	TCLP	Solid	6010B	366368
500-121566-5	1314V3-33-B01 (0-6)	TCLP	Solid	6010B	366368
500-121566-6	1314V3-33-B01 (6-12)	TCLP	Solid	6010B	366368
500-121566-7	1314V3-33-B03 (0-6)	TCLP	Solid	6010B	366368
500-121566-8	1314V3-33-B03 (6-12)	TCLP	Solid	6010B	366368
500-121566-9	1314V3-33-B05 (0-6)	TCLP	Solid	6010B	366368
500-121566-10	1314V3-33-B05 (6-12)	TCLP	Solid	6010B	366368
500-121566-11	1314V3-33-B04 (0-6)	TCLP	Solid	6010B	366368
500-121566-12	1314V3-33-B04 (6-12)	TCLP	Solid	6010B	366368
500-121566-13	1314V3-33-B06 (0-6)	TCLP	Solid	6010B	366368
500-121566-14	1314V3-33-B06 (6-12)	TCLP	Solid	6010B	366368
LB 500-366180/1-D	Method Blank	TCLP	Solid	6010B	366368
LCS 500-366368/2-A	Lab Control Sample	Total/NA	Solid	6010B	366368
500-121566-14 MS	1314V3-33-B06 (6-12)	TCLP	Solid	6010B	366368
500-121566-14 DU	1314V3-33-B06 (6-12)	TCLP	Solid	6010B	366368

Analysis Batch: 366836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	SPLP East	Solid	6010B	366571
500-121566-2	1314V3-33-B02 (5-9.4)	SPLP East	Solid	6010B	366571
500-121566-3	1314V3-33-B07 (0-8)	SPLP East	Solid	6010B	366571
500-121566-4	1314V3-33-B07 (0-8)D	SPLP East	Solid	6010B	366571
500-121566-5	1314V3-33-B01 (0-6)	SPLP East	Solid	6010B	366571
500-121566-6	1314V3-33-B01 (6-12)	SPLP East	Solid	6010B	366571
500-121566-9	1314V3-33-B05 (0-6)	SPLP East	Solid	6010B	366571
500-121566-10	1314V3-33-B05 (6-12)	SPLP East	Solid	6010B	366571
500-121566-11	1314V3-33-B04 (0-6)	SPLP East	Solid	6010B	366571
500-121566-12	1314V3-33-B04 (6-12)	SPLP East	Solid	6010B	366571
500-121566-13	1314V3-33-B06 (0-6)	SPLP East	Solid	6010B	366571
500-121566-14	1314V3-33-B06 (6-12)	SPLP East	Solid	6010B	366571
LB 500-366333/1-B	Method Blank	SPLP East	Solid	6010B	366571
LCS 500-366571/2-A	Lab Control Sample	Total/NA	Solid	6010B	366571
500-121566-14 MS	1314V3-33-B06 (6-12)	SPLP East	Solid	6010B	366571
500-121566-14 DU	1314V3-33-B06 (6-12)	SPLP East	Solid	6010B	366571

Analysis Batch: 367012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	6010B	366379
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	6010B	366379
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	6010B	366379
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	6010B	366379
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	6010B	366379
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	6010B	366379
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	6010B	366379

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Metals (Continued)

Analysis Batch: 367012 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	6010B	366379
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	6010B	366379
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	6010B	366379
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	6010B	366379
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	6010B	366379
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	6010B	366379
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	6010B	366379
MB 500-366379/1-A	Method Blank	Total/NA	Solid	6010B	366379
LCS 500-366379/2-A	Lab Control Sample	Total/NA	Solid	6010B	366379
500-121566-1 MS	1314V3-33-B02 (0-5)	Total/NA	Solid	6010B	366379
500-121566-1 MSD	1314V3-33-B02 (0-5)	Total/NA	Solid	6010B	366379
500-121566-1 DU	1314V3-33-B02 (0-5)	Total/NA	Solid	6010B	366379

General Chemistry

Analysis Batch: 365937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	Moisture	
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	Moisture	
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	Moisture	
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	Moisture	
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	Moisture	
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	Moisture	
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	Moisture	
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	Moisture	
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	Moisture	
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	Moisture	
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	Moisture	
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	Moisture	
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	Moisture	
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	Moisture	
500-121566-1 DU	1314V3-33-B02 (0-5)	Total/NA	Solid	Moisture	

Analysis Batch: 366581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-1	1314V3-33-B02 (0-5)	Total/NA	Solid	9045D	
500-121566-2	1314V3-33-B02 (5-9.4)	Total/NA	Solid	9045D	
500-121566-3	1314V3-33-B07 (0-8)	Total/NA	Solid	9045D	
500-121566-4	1314V3-33-B07 (0-8)D	Total/NA	Solid	9045D	
500-121566-5	1314V3-33-B01 (0-6)	Total/NA	Solid	9045D	
500-121566-6	1314V3-33-B01 (6-12)	Total/NA	Solid	9045D	
500-121566-7	1314V3-33-B03 (0-6)	Total/NA	Solid	9045D	
500-121566-8	1314V3-33-B03 (6-12)	Total/NA	Solid	9045D	
500-121566-9	1314V3-33-B05 (0-6)	Total/NA	Solid	9045D	
500-121566-10	1314V3-33-B05 (6-12)	Total/NA	Solid	9045D	

Analysis Batch: 366858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-11	1314V3-33-B04 (0-6)	Total/NA	Solid	9045D	
500-121566-12	1314V3-33-B04 (6-12)	Total/NA	Solid	9045D	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

General Chemistry (Continued)

Analysis Batch: 366858 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121566-13	1314V3-33-B06 (0-6)	Total/NA	Solid	9045D	
500-121566-14	1314V3-33-B06 (6-12)	Total/NA	Solid	9045D	
500-121566-11 DU	1314V3-33-B04 (0-6)	Total/NA	Solid	9045D	

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Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (70-120)	DBFM (75-120)	12DCE (69-134)	TOL (75-123)
500-121566-1	1314V3-33-B02 (0-5)	98	111	112	109
500-121566-2	1314V3-33-B02 (5-9.4)	91	105	102	107
500-121566-3	1314V3-33-B07 (0-8)	100	109	109	108
500-121566-4	1314V3-33-B07 (0-8)D	90	99	100	103
500-121566-5	1314V3-33-B01 (0-6)	98	110	110	108
500-121566-6	1314V3-33-B01 (6-12)	99	108	108	113
500-121566-7	1314V3-33-B03 (0-6)	96	110	109	95
500-121566-8	1314V3-33-B03 (6-12)	102	100	101	107
500-121566-9	1314V3-33-B05 (0-6)	100	108	100	115
500-121566-10	1314V3-33-B05 (6-12)	96	101	102	111
500-121566-11	1314V3-33-B04 (0-6)	98	111	112	107
500-121566-12	1314V3-33-B04 (6-12)	105	107	99	105
500-121566-13	1314V3-33-B06 (0-6)	99	110	106	108
500-121566-14	1314V3-33-B06 (6-12)	99	105	95	106
LCS 500-366061/5	Lab Control Sample	103	104	103	110
LCS 500-366259/5	Lab Control Sample	94	104	98	106
LCSD 500-366061/6	Lab Control Sample Dup	99	104	102	108
LCSD 500-366259/6	Lab Control Sample Dup	102	104	101	109
MB 500-366061/7	Method Blank	99	106	105	106
MB 500-366259/7	Method Blank	97	108	99	105

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	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (40-130)	PHL (36-123)	NBZ (33-124)	FBP (42-115)	TBP (25-130)	TPH (25-150)
500-121566-1	1314V3-33-B02 (0-5)	106	112	105	95	75	130
500-121566-1 MS	1314V3-33-B02 (0-5)	103	113	104	98	80	208 X
500-121566-1 MSD	1314V3-33-B02 (0-5)	98	111	99	89	77	199 X
500-121566-2	1314V3-33-B02 (5-9.4)	110	119	106	97	84	126
500-121566-3	1314V3-33-B07 (0-8)	103	113	103	95	60	126
500-121566-4	1314V3-33-B07 (0-8)D	101	110	100	92	59	132
500-121566-5	1314V3-33-B01 (0-6)	100	104	98	91	51	134
500-121566-6	1314V3-33-B01 (6-12)	100	109	98	86	80	120
500-121566-7	1314V3-33-B03 (0-6)	101	108	101	91	70	174 X
500-121566-7 - DL	1314V3-33-B03 (0-6)	51	48	94	92	32	104
500-121566-8	1314V3-33-B03 (6-12)	101	105	97	86	77	128
500-121566-9	1314V3-33-B05 (0-6)	113	122	108	100	84	136
500-121566-10	1314V3-33-B05 (6-12)	110	113	106	96	75	126
500-121566-11	1314V3-33-B04 (0-6)	103	67	91	86	31	160 X
500-121566-12	1314V3-33-B04 (6-12)	102	97	83	81	72	95
500-121566-13	1314V3-33-B06 (0-6)	97	91	90	81	55	90

TestAmerica Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (40-130)	PHL (36-123)	NBZ (33-124)	FBP (42-115)	TBP (25-130)	TPH (25-150)
500-121566-14	1314V3-33-B06 (6-12)	98	91	86	86	69	95
LCS 500-366455/2-A	Lab Control Sample	108	106	95	86	80	95
MB 500-366455/1-A	Method Blank	105	103	87	89	66	98

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPH = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-366061/7

Matrix: Solid

Analysis Batch: 366061

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			12/21/16 13:14	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/21/16 13:14	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/21/16 13:14	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/21/16 13:14	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/21/16 13:14	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/21/16 13:14	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/21/16 13:14	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/21/16 13:14	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/21/16 13:14	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/21/16 13:14	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/21/16 13:14	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/21/16 13:14	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/21/16 13:14	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/21/16 13:14	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/21/16 13:14	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/21/16 13:14	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/21/16 13:14	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/21/16 13:14	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/21/16 13:14	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/21/16 13:14	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/21/16 13:14	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/21/16 13:14	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/21/16 13:14	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/21/16 13:14	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/21/16 13:14	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/21/16 13:14	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/21/16 13:14	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/21/16 13:14	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/21/16 13:14	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/21/16 13:14	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/21/16 13:14	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/21/16 13:14	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/21/16 13:14	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/21/16 13:14	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/21/16 13:14	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/21/16 13:14	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/21/16 13:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120		12/21/16 13:14	1
Dibromofluoromethane	106		75 - 120		12/21/16 13:14	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134		12/21/16 13:14	1
Toluene-d8 (Surr)	106		75 - 123		12/21/16 13:14	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-366061/5

Matrix: Solid

Analysis Batch: 366061

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	0.0631		mg/Kg		126	40 - 148
Benzene	0.0500	0.0502		mg/Kg		100	70 - 120
Bromodichloromethane	0.0500	0.0501		mg/Kg		100	67 - 120
Bromoform	0.0500	0.0518		mg/Kg		104	50 - 129
Bromomethane	0.0500	0.0477		mg/Kg		95	50 - 134
2-Butanone (MEK)	0.0500	0.0541		mg/Kg		108	47 - 138
Carbon disulfide	0.0500	0.0464		mg/Kg		93	67 - 133
Carbon tetrachloride	0.0500	0.0449		mg/Kg		90	65 - 123
Chlorobenzene	0.0500	0.0498		mg/Kg		100	70 - 120
Chloroethane	0.0500	0.0443		mg/Kg		89	40 - 150
Chloroform	0.0500	0.0492		mg/Kg		98	70 - 120
Chloromethane	0.0500	0.0575		mg/Kg		115	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0489		mg/Kg		98	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0524		mg/Kg		105	70 - 120
Dibromochloromethane	0.0500	0.0515		mg/Kg		103	68 - 120
1,1-Dichloroethane	0.0500	0.0489		mg/Kg		98	70 - 125
1,2-Dichloroethane	0.0500	0.0520		mg/Kg		104	65 - 126
1,1-Dichloroethene	0.0500	0.0455		mg/Kg		91	70 - 122
1,2-Dichloropropane	0.0500	0.0517		mg/Kg		103	70 - 126
Ethylbenzene	0.0500	0.0484		mg/Kg		97	70 - 120
2-Hexanone	0.0500	0.0566		mg/Kg		113	51 - 139
Methylene Chloride	0.0500	0.0469		mg/Kg		94	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0523		mg/Kg		105	51 - 141
Methyl tert-butyl ether	0.0500	0.0521		mg/Kg		104	70 - 121
Styrene	0.0500	0.0507		mg/Kg		101	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0532		mg/Kg		106	70 - 125
Tetrachloroethene	0.0500	0.0444		mg/Kg		89	70 - 122
Toluene	0.0500	0.0497		mg/Kg		99	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0474		mg/Kg		95	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0521		mg/Kg		104	70 - 121
1,1,1-Trichloroethane	0.0500	0.0461		mg/Kg		92	70 - 120
1,1,2-Trichloroethane	0.0500	0.0535		mg/Kg		107	70 - 120
Trichloroethene	0.0500	0.0469		mg/Kg		94	70 - 124
Vinyl acetate	0.0500	0.0577		mg/Kg		115	40 - 150
Vinyl chloride	0.0500	0.0499		mg/Kg		100	64 - 125
Xylenes, Total	0.100	0.0996		mg/Kg		100	70 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		70 - 120
Dibromofluoromethane	104		75 - 120
1,2-Dichloroethane-d4 (Surr)	103		69 - 134
Toluene-d8 (Surr)	110		75 - 123

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-366061/6

Matrix: Solid

Analysis Batch: 366061

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0662		mg/Kg		132	40 - 148	5	30
Benzene	0.0500	0.0505		mg/Kg		101	70 - 120	1	30
Bromodichloromethane	0.0500	0.0521		mg/Kg		104	67 - 120	4	30
Bromoform	0.0500	0.0530		mg/Kg		106	50 - 129	2	30
Bromomethane	0.0500	0.0480		mg/Kg		96	50 - 134	1	30
2-Butanone (MEK)	0.0500	0.0591		mg/Kg		118	47 - 138	9	30
Carbon disulfide	0.0500	0.0479		mg/Kg		96	67 - 133	3	30
Carbon tetrachloride	0.0500	0.0456		mg/Kg		91	65 - 123	2	30
Chlorobenzene	0.0500	0.0502		mg/Kg		100	70 - 120	1	30
Chloroethane	0.0500	0.0438		mg/Kg		88	40 - 150	1	30
Chloroform	0.0500	0.0513		mg/Kg		103	70 - 120	4	30
Chloromethane	0.0500	0.0560		mg/Kg		112	63 - 135	3	30
cis-1,2-Dichloroethene	0.0500	0.0502		mg/Kg		100	70 - 120	3	30
cis-1,3-Dichloropropene	0.0500	0.0512		mg/Kg		102	70 - 120	2	30
Dibromochloromethane	0.0500	0.0507		mg/Kg		101	68 - 120	2	30
1,1-Dichloroethane	0.0500	0.0509		mg/Kg		102	70 - 125	4	30
1,2-Dichloroethane	0.0500	0.0534		mg/Kg		107	65 - 126	3	30
1,1-Dichloroethene	0.0500	0.0476		mg/Kg		95	70 - 122	5	30
1,2-Dichloropropane	0.0500	0.0538		mg/Kg		108	70 - 126	4	30
Ethylbenzene	0.0500	0.0481		mg/Kg		96	70 - 120	1	30
2-Hexanone	0.0500	0.0577		mg/Kg		115	51 - 139	2	30
Methylene Chloride	0.0500	0.0500		mg/Kg		100	70 - 121	6	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0526		mg/Kg		105	51 - 141	1	30
Methyl tert-butyl ether	0.0500	0.0545		mg/Kg		109	70 - 121	5	30
Styrene	0.0500	0.0509		mg/Kg		102	70 - 121	0	30
1,1,1,2-Tetrachloroethane	0.0500	0.0572		mg/Kg		114	70 - 125	7	30
Tetrachloroethene	0.0500	0.0457		mg/Kg		91	70 - 122	3	30
Toluene	0.0500	0.0491		mg/Kg		98	70 - 121	1	30
trans-1,2-Dichloroethene	0.0500	0.0488		mg/Kg		98	70 - 120	3	30
trans-1,3-Dichloropropene	0.0500	0.0517		mg/Kg		103	70 - 121	1	30
1,1,1-Trichloroethane	0.0500	0.0473		mg/Kg		95	70 - 120	3	30
1,1,2-Trichloroethane	0.0500	0.0536		mg/Kg		107	70 - 120	0	30
Trichloroethene	0.0500	0.0479		mg/Kg		96	70 - 124	2	30
Vinyl acetate	0.0500	0.0566		mg/Kg		113	40 - 150	2	30
Vinyl chloride	0.0500	0.0486		mg/Kg		97	64 - 125	3	30
Xylenes, Total	0.100	0.0982		mg/Kg		98	70 - 123	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		70 - 120
Dibromofluoromethane	104		75 - 120
1,2-Dichloroethane-d4 (Surr)	102		69 - 134
Toluene-d8 (Surr)	108		75 - 123

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-366259/7

Matrix: Solid

Analysis Batch: 366259

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			12/22/16 10:09	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/22/16 10:09	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/22/16 10:09	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/22/16 10:09	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/22/16 10:09	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/22/16 10:09	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/22/16 10:09	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/22/16 10:09	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/22/16 10:09	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/22/16 10:09	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/22/16 10:09	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/22/16 10:09	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/22/16 10:09	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/22/16 10:09	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/22/16 10:09	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/22/16 10:09	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/22/16 10:09	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/22/16 10:09	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/22/16 10:09	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/22/16 10:09	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/22/16 10:09	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/22/16 10:09	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/22/16 10:09	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/22/16 10:09	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/22/16 10:09	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/22/16 10:09	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/22/16 10:09	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/22/16 10:09	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/22/16 10:09	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/22/16 10:09	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/22/16 10:09	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/22/16 10:09	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/22/16 10:09	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/22/16 10:09	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/22/16 10:09	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/22/16 10:09	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/22/16 10:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120		12/22/16 10:09	1
Dibromofluoromethane	108		75 - 120		12/22/16 10:09	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134		12/22/16 10:09	1
Toluene-d8 (Surr)	105		75 - 123		12/22/16 10:09	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-366259/5

Matrix: Solid

Analysis Batch: 366259

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	0.0561		mg/Kg		112	40 - 148
Benzene	0.0500	0.0501		mg/Kg		100	70 - 120
Bromodichloromethane	0.0500	0.0484		mg/Kg		97	67 - 120
Bromoform	0.0500	0.0466		mg/Kg		93	50 - 129
Bromomethane	0.0500	0.0466		mg/Kg		93	50 - 134
2-Butanone (MEK)	0.0500	0.0525		mg/Kg		105	47 - 138
Carbon disulfide	0.0500	0.0479		mg/Kg		96	67 - 133
Carbon tetrachloride	0.0500	0.0472		mg/Kg		94	65 - 123
Chlorobenzene	0.0500	0.0500		mg/Kg		100	70 - 120
Chloroethane	0.0500	0.0449		mg/Kg		90	40 - 150
Chloroform	0.0500	0.0505		mg/Kg		101	70 - 120
Chloromethane	0.0500	0.0561		mg/Kg		112	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0491		mg/Kg		98	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0508		mg/Kg		102	70 - 120
Dibromochloromethane	0.0500	0.0504		mg/Kg		101	68 - 120
1,1-Dichloroethane	0.0500	0.0511		mg/Kg		102	70 - 125
1,2-Dichloroethane	0.0500	0.0511		mg/Kg		102	65 - 126
1,1-Dichloroethene	0.0500	0.0479		mg/Kg		96	70 - 122
1,2-Dichloropropane	0.0500	0.0570		mg/Kg		114	70 - 126
Ethylbenzene	0.0500	0.0492		mg/Kg		98	70 - 120
2-Hexanone	0.0500	0.0530		mg/Kg		106	51 - 139
Methylene Chloride	0.0500	0.0483		mg/Kg		97	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0472		mg/Kg		94	51 - 141
Methyl tert-butyl ether	0.0500	0.0516		mg/Kg		103	70 - 121
Styrene	0.0500	0.0484		mg/Kg		97	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0518		mg/Kg		104	70 - 125
Tetrachloroethene	0.0500	0.0473		mg/Kg		95	70 - 122
Toluene	0.0500	0.0498		mg/Kg		100	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0480		mg/Kg		96	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0475		mg/Kg		95	70 - 121
1,1,1-Trichloroethane	0.0500	0.0482		mg/Kg		96	70 - 120
1,1,2-Trichloroethane	0.0500	0.0512		mg/Kg		102	70 - 120
Trichloroethene	0.0500	0.0524		mg/Kg		105	70 - 124
Vinyl acetate	0.0500	0.0553		mg/Kg		111	40 - 150
Vinyl chloride	0.0500	0.0484		mg/Kg		97	64 - 125
Xylenes, Total	0.100	0.0956		mg/Kg		96	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 120
Dibromofluoromethane	104		75 - 120
1,2-Dichloroethane-d4 (Surr)	98		69 - 134
Toluene-d8 (Surr)	106		75 - 123

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-366259/6

Matrix: Solid

Analysis Batch: 366259

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0533		mg/Kg		107	40 - 148	5	30
Benzene	0.0500	0.0512		mg/Kg		102	70 - 120	2	30
Bromodichloromethane	0.0500	0.0506		mg/Kg		101	67 - 120	5	30
Bromoform	0.0500	0.0495		mg/Kg		99	50 - 129	6	30
Bromomethane	0.0500	0.0466		mg/Kg		93	50 - 134	0	30
2-Butanone (MEK)	0.0500	0.0537		mg/Kg		107	47 - 138	2	30
Carbon disulfide	0.0500	0.0493		mg/Kg		99	67 - 133	3	30
Carbon tetrachloride	0.0500	0.0480		mg/Kg		96	65 - 123	2	30
Chlorobenzene	0.0500	0.0499		mg/Kg		100	70 - 120	0	30
Chloroethane	0.0500	0.0447		mg/Kg		89	40 - 150	0	30
Chloroform	0.0500	0.0517		mg/Kg		103	70 - 120	2	30
Chloromethane	0.0500	0.0581		mg/Kg		116	63 - 135	3	30
cis-1,2-Dichloroethene	0.0500	0.0514		mg/Kg		103	70 - 120	5	30
cis-1,3-Dichloropropene	0.0500	0.0518		mg/Kg		104	70 - 120	2	30
Dibromochloromethane	0.0500	0.0505		mg/Kg		101	68 - 120	0	30
1,1-Dichloroethane	0.0500	0.0520		mg/Kg		104	70 - 125	2	30
1,2-Dichloroethane	0.0500	0.0506		mg/Kg		101	65 - 126	1	30
1,1-Dichloroethene	0.0500	0.0493		mg/Kg		99	70 - 122	3	30
1,2-Dichloropropane	0.0500	0.0548		mg/Kg		110	70 - 126	4	30
Ethylbenzene	0.0500	0.0491		mg/Kg		98	70 - 120	0	30
2-Hexanone	0.0500	0.0490		mg/Kg		98	51 - 139	8	30
Methylene Chloride	0.0500	0.0498		mg/Kg		100	70 - 121	3	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0445		mg/Kg		89	51 - 141	6	30
Methyl tert-butyl ether	0.0500	0.0521		mg/Kg		104	70 - 121	1	30
Styrene	0.0500	0.0514		mg/Kg		103	70 - 121	6	30
1,1,1,2-Tetrachloroethane	0.0500	0.0502		mg/Kg		100	70 - 125	3	30
Tetrachloroethene	0.0500	0.0461		mg/Kg		92	70 - 122	3	30
Toluene	0.0500	0.0498		mg/Kg		100	70 - 121	0	30
trans-1,2-Dichloroethene	0.0500	0.0493		mg/Kg		99	70 - 120	3	30
trans-1,3-Dichloropropene	0.0500	0.0520		mg/Kg		104	70 - 121	9	30
1,1,1-Trichloroethane	0.0500	0.0494		mg/Kg		99	70 - 120	2	30
1,1,2-Trichloroethane	0.0500	0.0527		mg/Kg		105	70 - 120	3	30
Trichloroethene	0.0500	0.0488		mg/Kg		98	70 - 124	7	30
Vinyl acetate	0.0500	0.0558		mg/Kg		112	40 - 150	1	30
Vinyl chloride	0.0500	0.0508		mg/Kg		102	64 - 125	5	30
Xylenes, Total	0.100	0.101		mg/Kg		101	70 - 123	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	102		70 - 120
Dibromofluoromethane	104		75 - 120
1,2-Dichloroethane-d4 (Surr)	101		69 - 134
Toluene-d8 (Surr)	109		75 - 123

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-366455/1-A
Matrix: Solid
Analysis Batch: 366695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/23/16 07:25	12/27/16 15:13	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-366455/1-A
Matrix: Solid
Analysis Batch: 366695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366455

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		12/23/16 07:25	12/27/16 15:13	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/23/16 07:25	12/27/16 15:13	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/23/16 07:25	12/27/16 15:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	105		40 - 130	12/23/16 07:25	12/27/16 15:13	1
Phenol-d5	103		36 - 123	12/23/16 07:25	12/27/16 15:13	1
Nitrobenzene-d5	87		33 - 124	12/23/16 07:25	12/27/16 15:13	1
2-Fluorobiphenyl	89		42 - 115	12/23/16 07:25	12/27/16 15:13	1
2,4,6-Tribromophenol	66		25 - 130	12/23/16 07:25	12/27/16 15:13	1
Terphenyl-d14	98		25 - 150	12/23/16 07:25	12/27/16 15:13	1

Lab Sample ID: LCS 500-366455/2-A
Matrix: Solid
Analysis Batch: 366695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.23		mg/Kg		93	55 - 118
Bis(2-chloroethyl)ether	1.33	1.25		mg/Kg		94	53 - 116
1,3-Dichlorobenzene	1.33	1.11		mg/Kg		83	56 - 110
1,4-Dichlorobenzene	1.33	1.13		mg/Kg		85	57 - 110
1,2-Dichlorobenzene	1.33	1.12		mg/Kg		84	56 - 110
2-Methylphenol	1.33	1.39		mg/Kg		104	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.23		mg/Kg		92	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.36		mg/Kg		102	56 - 119
Hexachloroethane	1.33	1.14		mg/Kg		86	54 - 111
2-Chlorophenol	1.33	1.19		mg/Kg		90	57 - 117
Nitrobenzene	1.33	1.18		mg/Kg		89	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.25		mg/Kg		94	59 - 116
1,2,4-Trichlorobenzene	1.33	1.10		mg/Kg		83	60 - 116
Isophorone	1.33	1.17		mg/Kg		88	54 - 120
2,4-Dimethylphenol	1.33	1.06		mg/Kg		80	50 - 120
Hexachlorobutadiene	1.33	1.06		mg/Kg		80	56 - 120
Naphthalene	1.33	1.15		mg/Kg		86	58 - 116
2,4-Dichlorophenol	1.33	1.14		mg/Kg		85	61 - 116

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-366455/2-A
Matrix: Solid
Analysis Batch: 366695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	0.642	J	mg/Kg		48	10 - 150
2,4,6-Trichlorophenol	1.33	1.13		mg/Kg		85	50 - 120
2,4,5-Trichlorophenol	1.33	1.10		mg/Kg		83	42 - 119
Hexachlorocyclopentadiene	1.33	0.465	J	mg/Kg		35	10 - 116
2-Methylnaphthalene	1.33	1.17		mg/Kg		88	55 - 120
2-Nitroaniline	1.33	1.32		mg/Kg		99	52 - 121
2-Chloronaphthalene	1.33	1.15		mg/Kg		87	57 - 112
4-Chloro-3-methylphenol	1.33	1.23		mg/Kg		92	59 - 117
2,6-Dinitrotoluene	1.33	1.21		mg/Kg		91	57 - 118
2-Nitrophenol	1.33	1.20		mg/Kg		90	58 - 121
3-Nitroaniline	1.33	0.920		mg/Kg		69	20 - 144
Dimethyl phthalate	1.33	1.19		mg/Kg		89	60 - 112
2,4-Dinitrophenol	2.67	0.593	J	mg/Kg		22	10 - 110
Acenaphthylene	1.33	1.15		mg/Kg		86	57 - 116
2,4-Dinitrotoluene	1.33	1.25		mg/Kg		94	59 - 119
Acenaphthene	1.33	1.14		mg/Kg		86	52 - 113
Dibenzofuran	1.33	1.16		mg/Kg		87	59 - 110
4-Nitrophenol	2.67	2.19		mg/Kg		82	32 - 123
Fluorene	1.33	1.17		mg/Kg		87	56 - 115
4-Nitroaniline	1.33	1.69		mg/Kg		126	55 - 146
4-Bromophenyl phenyl ether	1.33	1.15		mg/Kg		86	61 - 124
Hexachlorobenzene	1.33	1.09		mg/Kg		82	62 - 126
Diethyl phthalate	1.33	1.23		mg/Kg		92	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.14		mg/Kg		85	61 - 111
Pentachlorophenol	2.67	1.90		mg/Kg		71	12 - 116
N-Nitrosodiphenylamine	1.33	1.23		mg/Kg		92	62 - 117
4,6-Dinitro-2-methylphenol	2.67	0.948		mg/Kg		36	10 - 110
Phenanthrene	1.33	1.19		mg/Kg		89	58 - 125
Anthracene	1.33	1.21		mg/Kg		91	57 - 118
Carbazole	1.33	1.42		mg/Kg		107	65 - 137
Di-n-butyl phthalate	1.33	1.29		mg/Kg		97	61 - 123
Fluoranthene	1.33	1.22		mg/Kg		92	61 - 124
Pyrene	1.33	1.22		mg/Kg		92	60 - 115
Butyl benzyl phthalate	1.33	1.32		mg/Kg		99	61 - 115
Benzo[a]anthracene	1.33	1.17		mg/Kg		87	63 - 115
Chrysene	1.33	1.17		mg/Kg		88	63 - 118
3,3'-Dichlorobenzidine	1.33	1.03		mg/Kg		78	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.35		mg/Kg		101	62 - 117
Di-n-octyl phthalate	1.33	1.36		mg/Kg		102	58 - 129
Benzo[b]fluoranthene	1.33	1.22		mg/Kg		91	61 - 123
Benzo[k]fluoranthene	1.33	1.19		mg/Kg		89	59 - 125
Benzo[a]pyrene	1.33	1.25		mg/Kg		94	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.21		mg/Kg		90	50 - 149
Dibenz(a,h)anthracene	1.33	1.23		mg/Kg		92	61 - 134
Benzo[g,h,i]perylene	1.33	1.25		mg/Kg		93	55 - 134
3 & 4 Methylphenol	1.33	1.50		mg/Kg		112	55 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-366455/2-A
Matrix: Solid
Analysis Batch: 366695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366455

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	108		40 - 130
Phenol-d5	106		36 - 123
Nitrobenzene-d5	95		33 - 124
2-Fluorobiphenyl	86		42 - 115
2,4,6-Tribromophenol	80		25 - 130
Terphenyl-d14	95		25 - 150

Lab Sample ID: 500-121566-1 MS
Matrix: Solid
Analysis Batch: 366664

Client Sample ID: 1314V3-33-B02 (0-5)
Prep Type: Total/NA
Prep Batch: 366455

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.17	F1	1.35	1.66	F1	mg/Kg	☼	122	55 - 118
Bis(2-chloroethyl)ether	<0.17	F1	1.35	1.62	F1	mg/Kg	☼	119	53 - 116
1,3-Dichlorobenzene	<0.17		1.35	1.22		mg/Kg	☼	90	56 - 110
1,4-Dichlorobenzene	<0.17		1.35	1.26		mg/Kg	☼	93	57 - 110
1,2-Dichlorobenzene	<0.17		1.35	1.23		mg/Kg	☼	91	56 - 110
2-Methylphenol	<0.17		1.35	1.50		mg/Kg	☼	111	53 - 123
2,2'-oxybis[1-chloropropane]	<0.17		1.35	1.29		mg/Kg	☼	95	22 - 133
N-Nitrosodi-n-propylamine	<0.069	F1	1.35	1.64	F1	mg/Kg	☼	121	56 - 119
Hexachloroethane	<0.17		1.35	0.934		mg/Kg	☼	69	54 - 111
2-Chlorophenol	<0.17		1.35	1.34		mg/Kg	☼	99	57 - 117
Nitrobenzene	<0.034		1.35	1.57		mg/Kg	☼	116	56 - 121
Bis(2-chloroethoxy)methane	<0.17		1.35	1.43		mg/Kg	☼	106	59 - 116
1,2,4-Trichlorobenzene	<0.17		1.35	1.21		mg/Kg	☼	90	60 - 116
Isophorone	<0.17		1.35	1.35		mg/Kg	☼	100	54 - 120
2,4-Dimethylphenol	<0.34		1.35	1.25		mg/Kg	☼	93	50 - 120
Hexachlorobutadiene	<0.17		1.35	1.15		mg/Kg	☼	85	56 - 120
Naphthalene	0.0065	J	1.35	1.26		mg/Kg	☼	93	58 - 116
2,4-Dichlorophenol	<0.34		1.35	1.25		mg/Kg	☼	92	61 - 116
4-Chloroaniline	<0.69		1.35	0.827		mg/Kg	☼	61	10 - 150
2,4,6-Trichlorophenol	<0.34		1.35	1.21		mg/Kg	☼	89	50 - 120
2,4,5-Trichlorophenol	<0.34		1.35	1.29		mg/Kg	☼	95	42 - 119
Hexachlorocyclopentadiene	<0.69	F1	1.35	<0.68	F1	mg/Kg	☼	0	10 - 116
2-Methylnaphthalene	<0.069		1.35	1.27		mg/Kg	☼	93	55 - 120
2-Nitroaniline	<0.17	F1	1.35	1.72	F1	mg/Kg	☼	127	52 - 121
2-Chloronaphthalene	<0.17		1.35	1.37		mg/Kg	☼	101	57 - 112
4-Chloro-3-methylphenol	<0.34		1.35	1.42		mg/Kg	☼	105	59 - 117
2,6-Dinitrotoluene	<0.17		1.35	1.29		mg/Kg	☼	95	57 - 118
2-Nitrophenol	<0.34		1.35	1.17		mg/Kg	☼	87	58 - 121
3-Nitroaniline	<0.34		1.35	1.10		mg/Kg	☼	81	20 - 144
Dimethyl phthalate	<0.17		1.35	1.32		mg/Kg	☼	97	60 - 112
2,4-Dinitrophenol	<0.69	F1	2.71	<0.68	F1	mg/Kg	☼	0	10 - 110
Acenaphthylene	<0.034		1.35	1.27		mg/Kg	☼	94	57 - 116
2,4-Dinitrotoluene	<0.17		1.35	1.17		mg/Kg	☼	86	59 - 119
Acenaphthene	0.012	J	1.35	1.25		mg/Kg	☼	91	52 - 113
Dibenzofuran	<0.17		1.35	1.37		mg/Kg	☼	101	59 - 110
4-Nitrophenol	<0.69		2.71	2.43		mg/Kg	☼	90	32 - 123

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-121566-1 MS

Matrix: Solid

Analysis Batch: 366664

Client Sample ID: 1314V3-33-B02 (0-5)

Prep Type: Total/NA

Prep Batch: 366455

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Fluorene	0.014	J	1.35	1.40		mg/Kg	☼	102	56 - 115	
4-Nitroaniline	<0.34		1.35	1.82		mg/Kg	☼	135	55 - 146	
4-Bromophenyl phenyl ether	<0.17		1.35	1.43		mg/Kg	☼	105	61 - 124	
Hexachlorobenzene	<0.069		1.35	1.36		mg/Kg	☼	101	62 - 126	
Diethyl phthalate	<0.17	F1	1.35	1.83	F1	mg/Kg	☼	135	58 - 117	
4-Chlorophenyl phenyl ether	<0.17		1.35	1.41		mg/Kg	☼	104	61 - 111	
Pentachlorophenol	<0.69	F1	2.71	<0.68	F1	mg/Kg	☼	0	12 - 116	
N-Nitrosodiphenylamine	<0.17		1.35	1.51		mg/Kg	☼	111	62 - 117	
4,6-Dinitro-2-methylphenol	<0.69	F1	2.71	<0.68	F1	mg/Kg	☼	0	10 - 110	
Phenanthrene	0.19		1.35	1.44		mg/Kg	☼	92	58 - 125	
Anthracene	0.041		1.35	1.35		mg/Kg	☼	97	57 - 118	
Carbazole	<0.17		1.35	1.52		mg/Kg	☼	113	65 - 137	
Di-n-butyl phthalate	<0.17		1.35	1.43		mg/Kg	☼	105	61 - 123	
Fluoranthene	0.32	F1	1.35	1.08	F1	mg/Kg	☼	56	61 - 124	
Pyrene	0.31	F1	1.35	2.72	E F1	mg/Kg	☼	179	60 - 115	
Butyl benzyl phthalate	<0.17	F1	1.35	2.62	E F1	mg/Kg	☼	193	61 - 115	
Benzo[a]anthracene	0.15		1.35	1.48		mg/Kg	☼	99	63 - 115	
Chrysene	0.14		1.35	1.28		mg/Kg	☼	84	63 - 118	
3,3'-Dichlorobenzidine	<0.17		1.35	0.672		mg/Kg	☼	50	40 - 110	
Bis(2-ethylhexyl) phthalate	<0.17	F1	1.35	2.66	E F1	mg/Kg	☼	196	62 - 117	
Di-n-octyl phthalate	<0.17	F1	1.35	0.552	F1	mg/Kg	☼	41	58 - 129	
Benzo[b]fluoranthene	0.26		1.35	1.72		mg/Kg	☼	108	61 - 123	
Benzo[k]fluoranthene	0.098		1.35	1.69		mg/Kg	☼	117	59 - 125	
Benzo[a]pyrene	0.17		1.35	1.68		mg/Kg	☼	112	64 - 122	
Indeno[1,2,3-cd]pyrene	0.061		1.35	1.17		mg/Kg	☼	82	50 - 149	
Dibenz(a,h)anthracene	0.021	J	1.35	1.12		mg/Kg	☼	81	61 - 134	
Benzo[g,h,i]perylene	0.056		1.35	1.16		mg/Kg	☼	82	55 - 134	
3 & 4 Methylphenol	<0.17		1.35	1.53		mg/Kg	☼	113	55 - 124	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	103		40 - 130
Phenol-d5	113		36 - 123
Nitrobenzene-d5	104		33 - 124
2-Fluorobiphenyl	98		42 - 115
2,4,6-Tribromophenol	80		25 - 130
Terphenyl-d14	208	X	25 - 150

Lab Sample ID: 500-121566-1 MSD

Matrix: Solid

Analysis Batch: 366664

Client Sample ID: 1314V3-33-B02 (0-5)

Prep Type: Total/NA

Prep Batch: 366455

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	Limits	RPD	
	Result	Qualifier		Result	Qualifier						RPD	Limit
Phenol	<0.17	F1	1.39	1.69	F1	mg/Kg	☼	122	55 - 118	2	30	
Bis(2-chloroethyl)ether	<0.17	F1	1.39	1.38		mg/Kg	☼	99	53 - 116	16	30	
1,3-Dichlorobenzene	<0.17		1.39	1.18		mg/Kg	☼	85	56 - 110	4	30	
1,4-Dichlorobenzene	<0.17		1.39	1.22		mg/Kg	☼	88	57 - 110	4	30	
1,2-Dichlorobenzene	<0.17		1.39	1.18		mg/Kg	☼	85	56 - 110	4	30	
2-Methylphenol	<0.17		1.39	1.56		mg/Kg	☼	113	53 - 123	4	30	

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-121566-1 MSD

Matrix: Solid

Analysis Batch: 366664

Client Sample ID: 1314V3-33-B02 (0-5)

Prep Type: Total/NA

Prep Batch: 366455

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.17		1.39	1.27		mg/Kg	☼	92	22 - 133	1	30
N-Nitrosodi-n-propylamine	<0.069	F1	1.39	1.56		mg/Kg	☼	113	56 - 119	5	30
Hexachloroethane	<0.17		1.39	0.883		mg/Kg	☼	64	54 - 111	6	30
2-Chlorophenol	<0.17		1.39	1.32		mg/Kg	☼	95	57 - 117	1	30
Nitrobenzene	<0.034		1.39	1.54		mg/Kg	☼	111	56 - 121	2	30
Bis(2-chloroethoxy)methane	<0.17		1.39	1.42		mg/Kg	☼	103	59 - 116	1	30
1,2,4-Trichlorobenzene	<0.17		1.39	1.23		mg/Kg	☼	89	60 - 116	2	30
Isophorone	<0.17		1.39	1.36		mg/Kg	☼	98	54 - 120	1	30
2,4-Dimethylphenol	<0.34		1.39	1.24		mg/Kg	☼	90	50 - 120	1	30
Hexachlorobutadiene	<0.17		1.39	1.17		mg/Kg	☼	84	56 - 120	2	30
Naphthalene	0.0065	J	1.39	1.26		mg/Kg	☼	90	58 - 116	0	30
2,4-Dichlorophenol	<0.34		1.39	1.27		mg/Kg	☼	92	61 - 116	2	30
4-Chloroaniline	<0.69		1.39	0.828		mg/Kg	☼	60	10 - 150	0	30
2,4,6-Trichlorophenol	<0.34		1.39	1.21		mg/Kg	☼	87	50 - 120	0	30
2,4,5-Trichlorophenol	<0.34		1.39	1.26		mg/Kg	☼	91	42 - 119	2	30
Hexachlorocyclopentadiene	<0.69	F1	1.39	<0.70	F1	mg/Kg	☼	0	10 - 116	NC	30
2-Methylnaphthalene	<0.069		1.39	1.27		mg/Kg	☼	92	55 - 120	0	30
2-Nitroaniline	<0.17	F1	1.39	1.60		mg/Kg	☼	115	52 - 121	7	30
2-Chloronaphthalene	<0.17		1.39	1.33		mg/Kg	☼	96	57 - 112	3	30
4-Chloro-3-methylphenol	<0.34		1.39	1.43		mg/Kg	☼	103	59 - 117	1	30
2,6-Dinitrotoluene	<0.17		1.39	1.25		mg/Kg	☼	90	57 - 118	3	30
2-Nitrophenol	<0.34		1.39	1.19		mg/Kg	☼	86	58 - 121	2	30
3-Nitroaniline	<0.34		1.39	1.11		mg/Kg	☼	80	20 - 144	1	30
Dimethyl phthalate	<0.17		1.39	1.25		mg/Kg	☼	90	60 - 112	5	30
2,4-Dinitrophenol	<0.69	F1	2.77	<0.70	F1	mg/Kg	☼	0	10 - 110	NC	30
Acenaphthylene	<0.034		1.39	1.26		mg/Kg	☼	91	57 - 116	1	30
2,4-Dinitrotoluene	<0.17		1.39	1.11		mg/Kg	☼	80	59 - 119	5	30
Acenaphthene	0.012	J	1.39	1.21		mg/Kg	☼	86	52 - 113	3	30
Dibenzofuran	<0.17		1.39	1.30		mg/Kg	☼	94	59 - 110	5	30
4-Nitrophenol	<0.69		2.77	2.37		mg/Kg	☼	85	32 - 123	3	30
Fluorene	0.014	J	1.39	1.29		mg/Kg	☼	92	56 - 115	8	30
4-Nitroaniline	<0.34		1.39	1.69		mg/Kg	☼	122	55 - 146	8	30
4-Bromophenyl phenyl ether	<0.17		1.39	1.40		mg/Kg	☼	101	61 - 124	2	30
Hexachlorobenzene	<0.069		1.39	1.34		mg/Kg	☼	97	62 - 126	2	30
Diethyl phthalate	<0.17	F1	1.39	1.58		mg/Kg	☼	114	58 - 117	14	30
4-Chlorophenyl phenyl ether	<0.17		1.39	1.30		mg/Kg	☼	94	61 - 111	8	30
Pentachlorophenol	<0.69	F1	2.77	<0.70	F1	mg/Kg	☼	0	12 - 116	NC	30
N-Nitrosodiphenylamine	<0.17		1.39	1.47		mg/Kg	☼	106	62 - 117	2	30
4,6-Dinitro-2-methylphenol	<0.69	F1	2.77	<0.70	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.19		1.39	1.38		mg/Kg	☼	86	58 - 125	4	30
Anthracene	0.041		1.39	1.33		mg/Kg	☼	93	57 - 118	2	30
Carbazole	<0.17		1.39	1.47		mg/Kg	☼	106	65 - 137	4	30
Di-n-butyl phthalate	<0.17		1.39	1.42		mg/Kg	☼	102	61 - 123	0	30
Fluoranthene	0.32	F1	1.39	1.06	F1	mg/Kg	☼	53	61 - 124	2	30
Pyrene	0.31	F1	1.39	2.58	E F1	mg/Kg	☼	164	60 - 115	6	30
Butyl benzyl phthalate	<0.17	F1	1.39	2.66	E F1	mg/Kg	☼	192	61 - 115	2	30
Benzo[a]anthracene	0.15		1.39	1.47		mg/Kg	☼	96	63 - 115	0	30
Chrysene	0.14		1.39	1.26		mg/Kg	☼	80	63 - 118	1	30

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-121566-1 MSD
Matrix: Solid
Analysis Batch: 366664

Client Sample ID: 1314V3-33-B02 (0-5)
Prep Type: Total/NA
Prep Batch: 366455

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
3,3'-Dichlorobenzidine	<0.17		1.39	0.764		mg/Kg	☼	55	40 - 110	13	30	
Bis(2-ethylhexyl) phthalate	<0.17	F1	1.39	2.65	E F1	mg/Kg	☼	191	62 - 117	0	30	
Di-n-octyl phthalate	<0.17	F1	1.39	0.552	F1	mg/Kg	☼	40	58 - 129	0	30	
Benzo[b]fluoranthene	0.26		1.39	1.71		mg/Kg	☼	104	61 - 123	1	30	
Benzo[k]fluoranthene	0.098		1.39	1.59		mg/Kg	☼	107	59 - 125	6	30	
Benzo[a]pyrene	0.17		1.39	1.68		mg/Kg	☼	109	64 - 122	0	30	
Indeno[1,2,3-cd]pyrene	0.061		1.39	1.19		mg/Kg	☼	81	50 - 149	2	30	
Dibenz(a,h)anthracene	0.021	J	1.39	1.14		mg/Kg	☼	81	61 - 134	2	30	
Benzo[g,h,i]perylene	0.056		1.39	1.21		mg/Kg	☼	83	55 - 134	5	30	
3 & 4 Methylphenol	<0.17		1.39	1.43		mg/Kg	☼	103	55 - 124	7	30	
MSD MSD												
Surrogate	%Recovery	Qualifier	Limits									
2-Fluorophenol	98		40 - 130									
Phenol-d5	111		36 - 123									
Nitrobenzene-d5	99		33 - 124									
2-Fluorobiphenyl	89		42 - 115									
2,4,6-Tribromophenol	77		25 - 130									
Terphenyl-d14	199	X	25 - 150									

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-366368/2-A
Matrix: Solid
Analysis Batch: 366692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366368

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Barium	0.500	0.482	J	mg/L		96	80 - 120	
Beryllium	0.0500	0.0474		mg/L		95	80 - 120	
Boron	1.00	0.876		mg/L		88	80 - 120	
Cadmium	0.0500	0.0462		mg/L		92	80 - 120	
Chromium	0.200	0.198		mg/L		99	80 - 120	
Cobalt	0.500	0.481		mg/L		96	80 - 120	
Iron	1.00	1.03		mg/L		103	80 - 120	
Lead	0.100	0.0976		mg/L		98	80 - 120	
Manganese	0.500	0.482		mg/L		96	80 - 120	
Nickel	0.500	0.478		mg/L		96	80 - 120	
Selenium	0.100	0.0861		mg/L		86	80 - 120	
Silver	0.0500	0.0468		mg/L		94	80 - 120	
Zinc	0.500	0.471	J	mg/L		94	80 - 120	

Lab Sample ID: MB 500-366379/1-A
Matrix: Solid
Analysis Batch: 367012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366379

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.42	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Barium	<1.0		1.0	0.18	mg/Kg		12/22/16 14:34	12/28/16 17:29	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-366379/1-A
Matrix: Solid
Analysis Batch: 367012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366379

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.40		0.40	0.087	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Boron	<5.0		5.0	0.70	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Calcium	<20		20	6.4	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Chromium	0.369	J	1.0	0.17	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Copper	<1.0		1.0	0.22	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Iron	14.9	J	20	7.7	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Lead	<0.50		0.50	0.25	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Magnesium	4.66	J	10	4.1	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Nickel	<1.0		1.0	0.27	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Potassium	<50		50	8.2	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Silver	<0.50		0.50	0.12	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Sodium	15.0	J	100	13	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/22/16 14:34	12/28/16 17:29	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/22/16 14:34	12/28/16 17:29	1

Lab Sample ID: LCS 500-366379/2-A
Matrix: Solid
Analysis Batch: 367012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366379

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	44.3		mg/Kg		89	80 - 120
Arsenic	10.0	9.28		mg/Kg		93	80 - 120
Barium	200	183		mg/Kg		92	80 - 120
Beryllium	5.00	4.58		mg/Kg		92	80 - 120
Boron	100	82.6		mg/Kg		83	80 - 120
Cadmium	5.00	4.53		mg/Kg		91	80 - 120
Calcium	1000	938		mg/Kg		94	80 - 120
Chromium	20.0	19.1		mg/Kg		96	80 - 120
Cobalt	50.0	46.4		mg/Kg		93	80 - 120
Copper	25.0	24.0		mg/Kg		96	80 - 120
Iron	100	110		mg/Kg		110	80 - 120
Lead	10.0	9.67		mg/Kg		97	80 - 120
Magnesium	1000	891		mg/Kg		89	80 - 120
Manganese	50.0	46.4		mg/Kg		93	80 - 120
Nickel	50.0	46.3		mg/Kg		93	80 - 120
Potassium	1000	907		mg/Kg		91	80 - 120
Selenium	10.0	8.61		mg/Kg		86	80 - 120
Silver	5.00	4.42		mg/Kg		88	80 - 120
Sodium	1000	938		mg/Kg		94	80 - 120
Thallium	10.0	8.94		mg/Kg		89	80 - 120
Vanadium	50.0	47.9		mg/Kg		96	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-121566-1 MS

Matrix: Solid

Analysis Batch: 367012

Client Sample ID: 1314V3-33-B02 (0-5)

Prep Type: Total/NA

Prep Batch: 366379

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Antimony	<1.0	F1	24.9	7.24	F1	mg/Kg	☼	29	75 - 125
Arsenic	2.0		4.99	6.41		mg/Kg	☼	88	75 - 125
Barium	26		99.7	113		mg/Kg	☼	86	75 - 125
Beryllium	0.20	J	2.49	2.32		mg/Kg	☼	85	75 - 125
Boron	1.1	J F1	49.9	35.9	F1	mg/Kg	☼	70	75 - 125
Cadmium	0.14		2.49	2.06		mg/Kg	☼	77	75 - 125
Calcium	7800		499	7510	4	mg/Kg	☼	-48	75 - 125
Chromium	6.3	B	9.97	16.3		mg/Kg	☼	100	75 - 125
Cobalt	4.1		24.9	27.3		mg/Kg	☼	93	75 - 125
Copper	6.4		12.5	17.7		mg/Kg	☼	91	75 - 125
Iron	7000	B	49.9	7980	4	mg/Kg	☼	2060	75 - 125
Lead	20		4.99	28.8	4	mg/Kg	☼	176	75 - 125
Magnesium	2900	B	499	3580	4	mg/Kg	☼	140	75 - 125
Manganese	210		24.9	215	4	mg/Kg	☼	36	75 - 125
Nickel	9.9		24.9	33.4		mg/Kg	☼	94	75 - 125
Potassium	260		499	868		mg/Kg	☼	121	75 - 125
Selenium	0.30	J F1	4.99	3.74	F1	mg/Kg	☼	69	75 - 125
Silver	<0.26		2.49	1.88		mg/Kg	☼	76	75 - 125
Sodium	85	B	499	518		mg/Kg	☼	87	75 - 125
Thallium	<0.51		4.99	4.02		mg/Kg	☼	81	75 - 125
Vanadium	10		24.9	33.9		mg/Kg	☼	94	75 - 125
Zinc	25		24.9	54.0		mg/Kg	☼	114	75 - 125

Lab Sample ID: 500-121566-1 MSD

Matrix: Solid

Analysis Batch: 367012

Client Sample ID: 1314V3-33-B02 (0-5)

Prep Type: Total/NA

Prep Batch: 366379

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Antimony	<1.0	F1	25.4	8.48	F1	mg/Kg	☼	33	75 - 125	16	20
Arsenic	2.0		5.07	6.45		mg/Kg	☼	87	75 - 125	1	20
Barium	26		101	110		mg/Kg	☼	83	75 - 125	2	20
Beryllium	0.20	J	2.54	2.36		mg/Kg	☼	85	75 - 125	2	20
Boron	1.1	J F1	50.7	37.4	F1	mg/Kg	☼	72	75 - 125	4	20
Cadmium	0.14		2.54	2.17		mg/Kg	☼	80	75 - 125	5	20
Calcium	7800		507	7900	4	mg/Kg	☼	30	75 - 125	5	20
Chromium	6.3	B	10.1	17.2		mg/Kg	☼	107	75 - 125	5	20
Cobalt	4.1		25.4	28.2		mg/Kg	☼	95	75 - 125	4	20
Copper	6.4		12.7	17.6		mg/Kg	☼	89	75 - 125	1	20
Iron	7000	B	50.7	7920	4	mg/Kg	☼	1902	75 - 125	1	20
Lead	20		5.07	24.9		mg/Kg	☼	95	75 - 125	15	20
Magnesium	2900	B	507	3840	4	mg/Kg	☼	188	75 - 125	7	20
Manganese	210		25.4	213	4	mg/Kg	☼	25	75 - 125	1	20
Nickel	9.9		25.4	35.1		mg/Kg	☼	99	75 - 125	5	20
Potassium	260		507	825		mg/Kg	☼	110	75 - 125	5	20
Selenium	0.30	J F1	5.07	3.93	F1	mg/Kg	☼	71	75 - 125	5	20
Silver	<0.26		2.54	1.98		mg/Kg	☼	78	75 - 125	5	20
Sodium	85	B	507	525		mg/Kg	☼	87	75 - 125	1	20
Thallium	<0.51		5.07	4.44		mg/Kg	☼	88	75 - 125	10	20

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-121566-1 MSD
Matrix: Solid
Analysis Batch: 367012

Client Sample ID: 1314V3-33-B02 (0-5)
Prep Type: Total/NA
Prep Batch: 366379

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Vanadium	10		25.4	35.2		mg/Kg	☼	98	75 - 125	4	20
Zinc	25		25.4	51.2		mg/Kg	☼	101	75 - 125	5	20

Lab Sample ID: 500-121566-1 DU
Matrix: Solid
Analysis Batch: 367012

Client Sample ID: 1314V3-33-B02 (0-5)
Prep Type: Total/NA
Prep Batch: 366379

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<1.0	F1	0.301	J	mg/Kg	☼	NC	20
Arsenic	2.0		2.10		mg/Kg	☼	3	20
Barium	26		49.1	F3	mg/Kg	☼	60	20
Beryllium	0.20	J	0.191	J	mg/Kg	☼	5	20
Boron	1.1	J F1	1.05	J	mg/Kg	☼	1	20
Cadmium	0.14		0.139		mg/Kg	☼	2	20
Calcium	7800		12300	F3	mg/Kg	☼	46	20
Chromium	6.3	B	7.08		mg/Kg	☼	11	20
Cobalt	4.1		4.56		mg/Kg	☼	11	20
Copper	6.4		6.95		mg/Kg	☼	9	20
Iron	7000	B	6840		mg/Kg	☼	2	20
Lead	20		25.0	F3	mg/Kg	☼	22	20
Magnesium	2900	B	2760		mg/Kg	☼	4	20
Manganese	210		422	F3	mg/Kg	☼	69	20
Nickel	9.9		12.5	F3	mg/Kg	☼	23	20
Potassium	260		259		mg/Kg	☼	2	20
Selenium	0.30	J F1	<0.50		mg/Kg	☼	NC	20
Silver	<0.26		<0.25		mg/Kg	☼	NC	20
Sodium	85	B	79.6		mg/Kg	☼	7	20
Thallium	<0.51		<0.50		mg/Kg	☼	NC	20
Vanadium	10		10.8		mg/Kg	☼	4	20
Zinc	25		26.8		mg/Kg	☼	5	20

Lab Sample ID: LCS 500-366571/2-A
Matrix: Solid
Analysis Batch: 366836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cadmium	0.0500	0.0470		mg/L		94	80 - 120
Lead	0.100	0.0955		mg/L		95	80 - 120
Manganese	0.500	0.491		mg/L		98	80 - 120

Lab Sample ID: LB 500-366180/1-D
Matrix: Solid
Analysis Batch: 366692

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 366368

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 15:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/16 13:48	12/23/16 15:54	1
Boron	<0.50		0.50	0.050	mg/L		12/22/16 13:48	12/23/16 15:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/22/16 13:48	12/23/16 15:54	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-366180/1-D
Matrix: Solid
Analysis Batch: 366692

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 366368

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chromium	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 15:54	1
Cobalt	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 15:54	1
Iron	<0.40		0.40	0.20	mg/L		12/22/16 13:48	12/23/16 15:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/22/16 13:48	12/23/16 15:54	1
Manganese	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 15:54	1
Nickel	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 15:54	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/16 13:48	12/23/16 15:54	1
Silver	<0.025		0.025	0.010	mg/L		12/22/16 13:48	12/23/16 15:54	1
Zinc	<0.50		0.50	0.020	mg/L		12/22/16 13:48	12/23/16 15:54	1

Lab Sample ID: 500-121566-14 MS
Matrix: Solid
Analysis Batch: 366692

Client Sample ID: 1314V3-33-B06 (6-12)
Prep Type: TCLP
Prep Batch: 366368

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Barium	0.65		0.500	1.13		mg/L		95	50 - 150
Beryllium	<0.0040		0.0500	0.0475		mg/L		95	50 - 150
Boron	0.084	J	1.00	0.903		mg/L		82	50 - 150
Cadmium	0.0020	J	0.0500	0.0510		mg/L		98	50 - 150
Chromium	<0.025		0.200	0.194		mg/L		97	50 - 150
Cobalt	<0.025		0.500	0.499		mg/L		100	50 - 150
Iron	<0.40		1.00	1.00		mg/L		100	50 - 150
Lead	<0.0075		0.100	0.103		mg/L		103	50 - 150
Manganese	0.26		0.500	0.714		mg/L		90	50 - 150
Nickel	<0.025		0.500	0.494		mg/L		99	50 - 150
Selenium	<0.050		0.100	0.110		mg/L		110	50 - 150
Silver	<0.025		0.0500	0.0545		mg/L		109	50 - 150
Zinc	<0.50		0.500	0.504		mg/L		101	50 - 150

Lab Sample ID: 500-121566-14 DU
Matrix: Solid
Analysis Batch: 366692

Client Sample ID: 1314V3-33-B06 (6-12)
Prep Type: TCLP
Prep Batch: 366368

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	
			Result	Qualifier			RPD	Limit
Barium	0.65		0.660		mg/L		1	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.084	J	0.0844	J	mg/L		1	20
Cadmium	0.0020	J	0.00209	J	mg/L		2	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	<0.025		<0.025		mg/L		NC	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.26		0.264		mg/L		0.4	20
Nickel	<0.025		<0.025		mg/L		NC	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	<0.50		<0.50		mg/L		NC	20

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-366333/1-B
Matrix: Solid
Analysis Batch: 366836

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 366571

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/23/16 14:24	12/28/16 02:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/23/16 14:24	12/28/16 02:45	1
Manganese	<0.025		0.025	0.010	mg/L		12/23/16 14:24	12/28/16 02:45	1

Lab Sample ID: 500-121566-14 MS
Matrix: Solid
Analysis Batch: 366836

Client Sample ID: 1314V3-33-B06 (6-12)
Prep Type: SPLP East
Prep Batch: 366571

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Manganese	0.076		0.500	0.613		mg/L		107	50 - 150

Lab Sample ID: 500-121566-14 DU
Matrix: Solid
Analysis Batch: 366836

Client Sample ID: 1314V3-33-B06 (6-12)
Prep Type: SPLP East
Prep Batch: 366571

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.076		0.0763		mg/L		0.3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-366368/2-A
Matrix: Solid
Analysis Batch: 366689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366368

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.462		mg/L		92	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LB 500-366180/1-C
Matrix: Solid
Analysis Batch: 366689

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 366368

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/22/16 13:48	12/23/16 14:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/16 13:48	12/23/16 14:43	1

Lab Sample ID: 500-121566-14 MS
Matrix: Solid
Analysis Batch: 366689

Client Sample ID: 1314V3-33-B06 (6-12)
Prep Type: TCLP
Prep Batch: 366368

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.460		mg/L		92	50 - 150
Thallium	<0.0020		0.100	0.107		mg/L		107	50 - 150

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-121566-14 DU
Matrix: Solid
Analysis Batch: 366689

Client Sample ID: 1314V3-33-B06 (6-12)
Prep Type: TCLP
Prep Batch: 366368

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-366353/12-A
Matrix: Solid
Analysis Batch: 366539

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366353

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		12/22/16 14:30	12/23/16 10:48	1

Lab Sample ID: LCS 500-366353/13-A
Matrix: Solid
Analysis Batch: 366539

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366353
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits

Lab Sample ID: LB 500-366180/1-B
Matrix: Solid
Analysis Batch: 366539

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 366353

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		12/22/16 14:30	12/23/16 10:58	1

Lab Sample ID: 500-121566-1 MS
Matrix: Solid
Analysis Batch: 366539

Client Sample ID: 1314V3-33-B02 (0-5)
Prep Type: TCLP
Prep Batch: 366353
%Rec.

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier							
Mercury	<0.00020		0.00100	0.000827		mg/L		83	50 - 150

Lab Sample ID: 500-121566-1 DU
Matrix: Solid
Analysis Batch: 366539

Client Sample ID: 1314V3-33-B02 (0-5)
Prep Type: TCLP
Prep Batch: 366353

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-366137/12-A
Matrix: Solid
Analysis Batch: 366345

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366137

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.017		0.017	0.0088	mg/Kg		12/21/16 14:45	12/22/16 09:35	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 500-366137/13-A
 Matrix: Solid
 Analysis Batch: 366345

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 366137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.158		mg/Kg		94	80 - 120

Method: 9045D - pH

Lab Sample ID: 500-121566-11 DU
 Matrix: Solid
 Analysis Batch: 366858

Client Sample ID: 1314V3-33-B04 (0-6)
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.8		8.8		SU		0.3	



Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (0-5)

Lab Sample ID: 500-121566-1

Date Collected: 12/15/16 08:15

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 02:59	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 16:22	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 14:50	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:05	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581		SMO	TAL CHI
					(Start)	12/23/16 17:45		
					(End)	12/23/16 18:30		
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B02 (0-5)

Lab Sample ID: 500-121566-1

Date Collected: 12/15/16 08:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366061	12/21/16 17:54	JMP	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 15:03	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 18:05	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 09:48	MJD	TAL CHI

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Date Collected: 12/15/16 08:20

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 03:21	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 16:27	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Date Collected: 12/15/16 08:20

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	366689	12/23/16 14:53	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:09	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B02 (5-9.4)

Lab Sample ID: 500-121566-2

Date Collected: 12/15/16 08:20

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366061	12/21/16 18:19	JMP	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 12:33	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 18:25	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 09:50	MJD	TAL CHI

Client Sample ID: 1314V3-33-B07 (0-8)

Lab Sample ID: 500-121566-3

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 03:28	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 16:32	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 14:57	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:10	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B07 (0-8)

Lab Sample ID: 500-121566-3

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366061	12/21/16 18:45	JMP	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 12:58	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 18:30	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 09:52	MJD	TAL CHI

Client Sample ID: 1314V3-33-B07 (0-8)D

Lab Sample ID: 500-121566-4

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 03:35	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 16:48	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:00	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:12	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B07 (0-8)D

Lab Sample ID: 500-121566-4

Date Collected: 12/15/16 08:50

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366061	12/21/16 19:10	JMP	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 15:28	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 18:34	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 09:54	MJD	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (0-6)

Lab Sample ID: 500-121566-5

Date Collected: 12/15/16 09:10

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 03:42	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 16:53	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:04	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:13	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B01 (0-6)

Lab Sample ID: 500-121566-5

Date Collected: 12/15/16 09:10

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366061	12/21/16 19:36	JMP	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 15:53	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 18:51	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:01	MJD	TAL CHI

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Date Collected: 12/15/16 09:15

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 03:48	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 16:58	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Date Collected: 12/15/16 09:15

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	366689	12/23/16 15:07	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:15	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B01 (6-12)

Lab Sample ID: 500-121566-6

Date Collected: 12/15/16 09:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 78.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366061	12/21/16 20:01	JMP	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 13:23	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 18:55	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:04	MJD	TAL CHI

Client Sample ID: 1314V3-33-B03 (0-6)

Lab Sample ID: 500-121566-7

Date Collected: 12/15/16 09:40

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:02	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:11	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:16	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B03 (0-6)

Lab Sample ID: 500-121566-7

Date Collected: 12/15/16 09:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366061	12/21/16 20:27	JMP	TAL CHI
Total/NA	Prep	3541	DL		366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D	DL	20	367001	12/29/16 11:26	AJD	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 16:43	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:00	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:06	MJD	TAL CHI

Client Sample ID: 1314V3-33-B03 (6-12)

Lab Sample ID: 500-121566-8

Date Collected: 12/15/16 09:45

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:07	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:14	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:18	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B03 (6-12)

Lab Sample ID: 500-121566-8

Date Collected: 12/15/16 09:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366259	12/22/16 14:48	BDW	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 13:48	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:04	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:08	MJD	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (0-6)

Lab Sample ID: 500-121566-9

Date Collected: 12/15/16 10:15

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 04:09	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:12	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:24	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:22	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:45 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B05 (0-6)

Lab Sample ID: 500-121566-9

Date Collected: 12/15/16 10:15

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366259	12/22/16 15:13	BDW	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 14:13	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:09	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:10	MJD	TAL CHI

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Date Collected: 12/15/16 10:20

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 04:15	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:17	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Date Collected: 12/15/16 10:20

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	366689	12/23/16 15:28	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:24	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366581	(Start) 12/23/16 17:55 (End) 12/23/16 18:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B05 (6-12)

Lab Sample ID: 500-121566-10

Date Collected: 12/15/16 10:20

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			366654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366259	12/22/16 15:39	BDW	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366664	12/27/16 14:38	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:13	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:13	MJD	TAL CHI

Client Sample ID: 1314V3-33-B04 (0-6)

Lab Sample ID: 500-121566-11

Date Collected: 12/15/16 10:55

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 04:22	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:21	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:31	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:25	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366858	(Start) 12/27/16 11:50 (End) 12/27/16 11:58	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B04 (0-6)

Lab Sample ID: 500-121566-11

Date Collected: 12/15/16 10:55

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366259	12/22/16 16:04	BDW	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366869	12/28/16 20:15	AJD	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:17	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:15	MJD	TAL CHI

Client Sample ID: 1314V3-33-B04 (6-12)

Lab Sample ID: 500-121566-12

Date Collected: 12/15/16 11:00

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 04:45	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:26	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:34	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:27	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366858	(Start) 12/27/16 12:06 (End) 12/27/16 12:15	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B04 (6-12)

Lab Sample ID: 500-121566-12

Date Collected: 12/15/16 11:00

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366259	12/22/16 16:30	BDW	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366695	12/27/16 15:42	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:22	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:17	MJD	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (0-6)

Lab Sample ID: 500-121566-13

Date Collected: 12/15/16 11:40

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 04:52	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:31	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6020A		1	366689	12/23/16 15:38	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:28	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366858	(Start) 12/27/16 12:15 (End) 12/27/16 12:23	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B06 (0-6)

Lab Sample ID: 500-121566-13

Date Collected: 12/15/16 11:40

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366259	12/22/16 16:55	BDW	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366695	12/27/16 16:11	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:27	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:19	MJD	TAL CHI

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Date Collected: 12/15/16 11:45

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			366333	12/22/16 10:53	RMP	TAL CHI
SPLP East	Prep	3010A			366571	12/23/16 14:24	JNH	TAL CHI
SPLP East	Analysis	6010B		1	366836	12/28/16 04:58	PJ1	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI
TCLP	Analysis	6010B		1	366692	12/23/16 17:43	KML	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	3010A			366368	12/22/16 13:48	JNH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Date Collected: 12/15/16 11:45

Matrix: Solid

Date Received: 12/16/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	366689	12/23/16 15:41	PFK	TAL CHI
TCLP	Leach	1311			366180	12/21/16 15:20	RMP	TAL CHI
TCLP	Prep	7470A			366353	12/22/16 14:30	MJD	TAL CHI
TCLP	Analysis	7470A		1	366539	12/23/16 11:30	MJD	TAL CHI
Total/NA	Analysis	9045D		1	366858	(Start) 12/27/16 12:23 (End) 12/27/16 12:32	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	365937	12/20/16 12:08	LWN	TAL CHI

Client Sample ID: 1314V3-33-B06 (6-12)

Lab Sample ID: 500-121566-14

Date Collected: 12/15/16 11:45

Matrix: Solid

Date Received: 12/16/16 09:40

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			365654	12/16/16 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		1	366259	12/22/16 17:20	BDW	TAL CHI
Total/NA	Prep	3541			366455	12/23/16 07:25	STW	TAL CHI
Total/NA	Analysis	8270D		1	366695	12/27/16 16:40	GES	TAL CHI
Total/NA	Prep	3050B			366379	12/22/16 14:34	JNH	TAL CHI
Total/NA	Analysis	6010B		1	367012	12/28/16 19:31	PJ1	TAL CHI
Total/NA	Prep	7471B			366137	12/21/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	366345	12/22/16 10:22	MJD	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121566-1

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 61
Phone: 708.534.5200 Fax: 708.53



500-121566 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 #: 500-121566
Chain of Custody Number: EE46-41
Page _____ of _____
Temperature °C of Cooler: 13

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 #		Sampling		Matrix												Comments	
IT4		50012744		Date Time <td colspan="2"># of Containers Matrix <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </td>		# of Containers Matrix <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td>													
Project Location/State		Sampler																	
Rock Island County IL		S. Cooper																	
1	MSMSD	1314V3-33-B02 (0-5)		12-15-16	0915	2	S	X	X	X	X	X							
2		1314V3-33-B02 (5-9.4)		12-15-16	0820	2	S	X	X	X	X	X							
3		1314V3-33-B07 (0-4)		12-15-16	0850	2	S	X	X	X	X	X							
4		1314V3-33-B07 (0-4) D		12-14-16	0850	2	S	X	X	X	X	X							
5		1314V3-33-B01 (0-6)		12-15-16	0910	2	S	X	X	X	X	X							
6		1314V3-33-B01 (6-12)		12-15-16	0915	2	S	X	X	X	X	X							
7		1314V3-33-B03 (0-6)		12-11-16	0940	2	S	X	X	X	X	X							
8		1314V3-33-B03 (6-12)		12-15-16	0945	2	S	X	X	X	X	X							
9		1314V3-33-B05 (0-6)		12-15-16	1015	2	S	X	X	X	X	X							
10		1314V3-33-B05 (6-12)		12-15-16	1020	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>EE</u>	Company: <u>EE</u>	Date: <u>12-14-16</u>	Time: <u>1100</u>	Received By: <u>Shirley...</u>	Company: <u>TR-CHE</u>	Date: <u>12/16/16</u>	Time: <u>0940</u>	Lab Courier: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____	Shipped: <u>FEDEX</u>
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: _____

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 #: 500-121506

Chain of Custody Number: E846-42

Page _____ of _____

Temperature °C of Cooler: _____

Client		Client Project #		Preservative							Preservative Key		
Project Name		Lab Project #		Parameter							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 Location/State		Lab PM											
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix							
EE		10C9008 0046.01											
I 74													
Lock Island (Lynch, IL)		5002744											
S Cooper		D. Wright											
11		1314V3-33-B04 (0-6)	12/5/16	1055	2 S	X	X	X	X	X			
12		1314V3-33-B04 (6-12)	12/5/16	1100	2 S	X	X	X	X	X			
13		1314V3-33-B06 (0-6)	12/5/16	1140	2 S	X	X	X	X	X			
14		1314V3-33-B06 (6-12)	12/5/16	1145	2 S	X	X	X	X	X			
 <div style="display: flex; justify-content: space-between;"> 12/15/16 12/15/16 </div> 													

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>EE</u>	Date: <u>12/15/16</u>	Time: <u>1100</u>	Received By: <u>[Signature]</u>	Company: <u>STA-CHE</u>	Date: <u>12/16/16</u>	Time: <u>0940</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: 500-121566-1

Login Number: 121566

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	1.3
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 <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):

604-610 19th Street (ISGS #1314V3-56)

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: 41.50708 Longitude: -90.50993

(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 Management Center.

Project Name: FAI 74 (I-74)Latitude: 41.50708 Longitude: -90.50993Uncontaminated 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 1314V3-56-B01 and -B03 were sampled within the construction zone adjacent to ISGS #1314V3-56 (Commercial Building). Refer to PSI Report for ISGS #1314V3-56 (Commercial Building) including Table 4-4, and Figures 4-4 and 4-16.

- 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 J120882-2.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

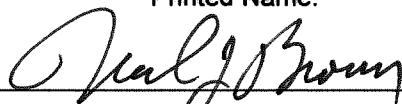
I, Neil J. Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental 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))

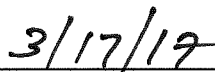
Company Name: Ecology and Environment, Inc.Street Address: 33 West Monroe StreetCity: Chicago State: IL Zip Code: 60603Phone: (312) 578-9243

Neil J. Brown

Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:



Date:



P.E. or L.P.G. Seal:

PTB #172-27; Work Order 46, Contract 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-56 (Commercial Building)		Comparison Criteria					
BORING	1314V3-56-B01	1314V3-56-B03	MACs			TACO		
SAMPLE	1314V3-56-B01 (0-3)	1314V3-56-B03 (0-3)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil						
DEPTH (feet)	0-3	0-3						
pH	8	8.2						
VOCs (None Detected)								
SVOCs (mg/kg)								
Anthracene	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	9	--	--	9	1,700	--
Chrysene	ND U	ND U	88	--	--	88	17,000	--
Fluoranthene	ND U	ND U	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	0.23 J	ND U	5	--	--	31	82	--
Arsenic	4.4	4.1	11.3	13	--	13	61	--
Barium	69	80	1,500	--	--	5,500	14,000	--
Beryllium	0.47	0.47	22	--	--	160	410	--
Boron	1.7 J	2.7	40	--	--	16,000	41,000	--
Cadmium	0.17	0.12	5.2	--	--	78	200	--
Calcium	2,300	3,300	--	--	--	--	--	--
Chromium	12	12	21	--	--	230	690	--
Cobalt	5.4	5.6	20	--	--	4,700	12,000	--
Copper	9.3	8.6	2,900	--	--	2,900	8,200	--
Iron	13,000	12,000	15,000	15,900	--	--	--	--
Lead	7.6	6.7	107	--	--	400	700	--
Magnesium	1,500	1,600	325,000	--	--	--	730,000	--
Manganese	620	500	630	636	--	1,600	4,100	--
Mercury	0.018	0.014 J	0.89	--	--	10	0.1	--
Nickel	16	11	100	--	--	1,600	4,100	--
Potassium	680	800	--	--	--	--	--	--
Selenium	0.26 J	ND U	1.3	--	--	390	1,000	--
Sodium	670	260	--	--	--	--	--	--
Thallium	1.1	0.95	2.6	--	--	6.3	160	--
Vanadium	21	19	550	--	--	550	1400	--
Zinc	25	24	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	0.46 J	0.43 J	--	--	--	--	--	2
Boron	0.051 J	0.092 J	--	--	--	--	--	2
Iron	0.34 J	0.21 J	--	--	--	--	--	5
Manganese	0.21 L	1.7 L	--	--	--	--	--	0.15
SPLP Metals (mg/L)								
Manganese	0.76 L	0.34 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: 500-120882-2
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

Authorized for release by:
12/16/2016 5:06:19 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

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Job ID: 500-120882-2

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-120882-2**

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: 500-120882-2

Client Sample ID: 1314V3-56-B03 (0-3)

Lab Sample ID: 500-120882-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	4.1		0.49	0.23	mg/Kg	1		☼	6010B	Total/NA
Barium	80		0.49	0.090	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.47		0.20	0.042	mg/Kg	1		☼	6010B	Total/NA
Boron	2.7		2.5	0.34	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.12		0.098	0.028	mg/Kg	1		☼	6010B	Total/NA
Calcium	3300		9.8	3.2	mg/Kg	1		☼	6010B	Total/NA
Chromium	12	B	0.49	0.084	mg/Kg	1		☼	6010B	Total/NA
Cobalt	5.6		0.25	0.055	mg/Kg	1		☼	6010B	Total/NA
Copper	8.6		0.49	0.11	mg/Kg	1		☼	6010B	Total/NA
Iron	12000		9.8	3.8	mg/Kg	1		☼	6010B	Total/NA
Lead	6.7		0.25	0.12	mg/Kg	1		☼	6010B	Total/NA
Magnesium	1600		4.9	2.0	mg/Kg	1		☼	6010B	Total/NA
Manganese	500		0.49	0.097	mg/Kg	1		☼	6010B	Total/NA
Nickel	11	B	0.49	0.13	mg/Kg	1		☼	6010B	Total/NA
Potassium	800		25	4.0	mg/Kg	1		☼	6010B	Total/NA
Sodium	260		49	6.5	mg/Kg	1		☼	6010B	Total/NA
Thallium	0.95		0.49	0.24	mg/Kg	1		☼	6010B	Total/NA
Vanadium	19		0.25	0.072	mg/Kg	1		☼	6010B	Total/NA
Zinc	24		0.98	0.31	mg/Kg	1		☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.092	J	0.50	0.050	mg/L	1			6010B	TCLP
Iron	0.21	J	0.40	0.20	mg/L	1			6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1			6010B	TCLP
Manganese	0.34		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.014	J	0.020	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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

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Client Sample ID: 1314V3-56-B01 (0-3)

Lab Sample ID: 500-120882-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Antimony	0.23	J	1.0	0.21	mg/Kg	1	☼	☼	6010B	Total/NA
Arsenic	4.4		0.51	0.23	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	69		0.51	0.093	mg/Kg	1	☼	☼	6010B	Total/NA
Beryllium	0.47		0.20	0.044	mg/Kg	1	☼	☼	6010B	Total/NA
Boron	1.7	J	2.5	0.35	mg/Kg	1	☼	☼	6010B	Total/NA
Cadmium	0.17		0.10	0.029	mg/Kg	1	☼	☼	6010B	Total/NA
Calcium	2300		10	3.3	mg/Kg	1	☼	☼	6010B	Total/NA
Chromium	12	B	0.51	0.087	mg/Kg	1	☼	☼	6010B	Total/NA
Cobalt	5.4		0.25	0.057	mg/Kg	1	☼	☼	6010B	Total/NA
Copper	9.3		0.51	0.11	mg/Kg	1	☼	☼	6010B	Total/NA
Iron	13000		10	3.9	mg/Kg	1	☼	☼	6010B	Total/NA
Lead	7.6		0.25	0.13	mg/Kg	1	☼	☼	6010B	Total/NA
Magnesium	1500		5.1	2.1	mg/Kg	1	☼	☼	6010B	Total/NA
Manganese	620		0.51	0.10	mg/Kg	1	☼	☼	6010B	Total/NA
Nickel	16	B	0.51	0.14	mg/Kg	1	☼	☼	6010B	Total/NA
Potassium	680		25	4.1	mg/Kg	1	☼	☼	6010B	Total/NA
Selenium	0.26	J	0.51	0.25	mg/Kg	1	☼	☼	6010B	Total/NA
Sodium	670		51	6.7	mg/Kg	1	☼	☼	6010B	Total/NA
Thallium	1.1		0.51	0.25	mg/Kg	1	☼	☼	6010B	Total/NA
Vanadium	21		0.25	0.074	mg/Kg	1	☼	☼	6010B	Total/NA
Zinc	25		1.0	0.32	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	0.46	J	0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1			6010B	TCLP
Iron	0.34	J	0.40	0.20	mg/L	1			6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.022	J B	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.76		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.018		0.018	0.0093	mg/Kg	1	☼	☼	7471B	Total/NA
pH	8.0		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: 500-120882-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120882-4	1314V3-56-B03 (0-3)	Solid	12/01/16 10:35	12/02/16 10:10
500-120882-7	1314V3-56-B01 (0-3)	Solid	12/01/16 11:05	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: 500-120882-2

Client Sample ID: 1314V3-56-B03 (0-3)

Lab Sample ID: 500-120882-4

Date Collected: 12/01/16 10:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.5

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	☼	12/02/16 16:10	12/06/16 14:54	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 14:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/02/16 16:10	12/06/16 14:54	1
Dibromofluoromethane	99		75 - 120	12/02/16 16:10	12/06/16 14:54	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/02/16 16:10	12/06/16 14:54	1
Toluene-d8 (Surr)	101		75 - 123	12/02/16 16:10	12/06/16 14:54	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	☼	12/10/16 09:29	12/14/16 02:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Client Sample ID: 1314V3-56-B03 (0-3)

Lab Sample ID: 500-120882-4

Date Collected: 12/01/16 10:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Client Sample ID: 1314V3-56-B03 (0-3)

Lab Sample ID: 500-120882-4

Date Collected: 12/01/16 10:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.5

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	☼	12/10/16 09:29	12/14/16 02:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 02:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		40 - 130	12/10/16 09:29	12/14/16 02:31	1
Phenol-d5	99		36 - 123	12/10/16 09:29	12/14/16 02:31	1
Nitrobenzene-d5	94		33 - 124	12/10/16 09:29	12/14/16 02:31	1
2-Fluorobiphenyl	80		42 - 115	12/10/16 09:29	12/14/16 02:31	1
2,4,6-Tribromophenol	64		25 - 130	12/10/16 09:29	12/14/16 02:31	1
Terphenyl-d14	105		25 - 150	12/10/16 09:29	12/14/16 02:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.98		0.98	0.20	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Arsenic	4.1		0.49	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Barium	80		0.49	0.090	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Beryllium	0.47		0.20	0.042	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Boron	2.7		2.5	0.34	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Cadmium	0.12		0.098	0.028	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Calcium	3300		9.8	3.2	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Chromium	12 B		0.49	0.084	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Cobalt	5.6		0.25	0.055	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Copper	8.6		0.49	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Iron	12000		9.8	3.8	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Lead	6.7		0.25	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Magnesium	1600		4.9	2.0	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Manganese	500		0.49	0.097	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Nickel	11 B		0.49	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Potassium	800		25	4.0	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Selenium	<0.49		0.49	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Silver	<0.25		0.25	0.057	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Sodium	260		49	6.5	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Thallium	0.95		0.49	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Vanadium	19		0.25	0.072	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
Zinc	24		0.98	0.31	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	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		12/06/16 14:16	12/07/16 14:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:32	1
Boron	0.092	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Client Sample ID: 1314V3-56-B03 (0-3)

Lab Sample ID: 500-120882-4

Date Collected: 12/01/16 10:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.5

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		12/06/16 14:16	12/07/16 14:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:32	1
Iron	0.21	J	0.40	0.20	mg/L		12/06/16 14:16	12/07/16 14:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 14:32	1
Manganese	1.7		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:32	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 14:32	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:32	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 14:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.34		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 20:24	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		12/06/16 14:16	12/07/16 19:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 19:32	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		12/06/16 13:45	12/07/16 10:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.020	0.010	mg/Kg	☼	12/05/16 14:30	12/06/16 14:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/06/16 15:01	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Client Sample ID: 1314V3-56-B01 (0-3)

Lab Sample ID: 500-120882-7

Date Collected: 12/01/16 11:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 16:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/02/16 16:10	12/06/16 16:08	1
Dibromofluoromethane	102		75 - 120	12/02/16 16:10	12/06/16 16:08	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/02/16 16:10	12/06/16 16:08	1
Toluene-d8 (Surr)	99		75 - 123	12/02/16 16:10	12/06/16 16:08	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	☼	12/10/16 09:29	12/14/16 03:48	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Client Sample ID: 1314V3-56-B01 (0-3)

Lab Sample ID: 500-120882-7

Date Collected: 12/01/16 11:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 83.0

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	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Client Sample ID: 1314V3-56-B01 (0-3)

Lab Sample ID: 500-120882-7

Date Collected: 12/01/16 11:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 83.0

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	☼	12/10/16 09:29	12/14/16 03:48	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 03:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		40 - 130	12/10/16 09:29	12/14/16 03:48	1
Phenol-d5	115		36 - 123	12/10/16 09:29	12/14/16 03:48	1
Nitrobenzene-d5	101		33 - 124	12/10/16 09:29	12/14/16 03:48	1
2-Fluorobiphenyl	89		42 - 115	12/10/16 09:29	12/14/16 03:48	1
2,4,6-Tribromophenol	70		25 - 130	12/10/16 09:29	12/14/16 03:48	1
Terphenyl-d14	104		25 - 150	12/10/16 09:29	12/14/16 03:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.0	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Arsenic	4.4		0.51	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Barium	69		0.51	0.093	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Beryllium	0.47		0.20	0.044	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Boron	1.7	J	2.5	0.35	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Cadmium	0.17		0.10	0.029	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Calcium	2300		10	3.3	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Chromium	12	B	0.51	0.087	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Cobalt	5.4		0.25	0.057	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Copper	9.3		0.51	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Iron	13000		10	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Lead	7.6		0.25	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Magnesium	1500		5.1	2.1	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Manganese	620		0.51	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Nickel	16	B	0.51	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Potassium	680		25	4.1	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Selenium	0.26	J	0.51	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Sodium	670		51	6.7	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Thallium	1.1		0.51	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Vanadium	21		0.25	0.074	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1
Zinc	25		1.0	0.32	mg/Kg	☼	12/07/16 08:30	12/07/16 17:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.46	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:46	1
Boron	0.051	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:46	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

Client Sample ID: 1314V3-56-B01 (0-3)

Lab Sample ID: 500-120882-7

Date Collected: 12/01/16 11:05

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 83.0

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		12/06/16 14:16	12/07/16 14:46	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:46	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:46	1
Iron	0.34	J	0.40	0.20	mg/L		12/06/16 14:16	12/07/16 14:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 14:46	1
Manganese	0.21		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:46	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:46	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 14:46	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:46	1
Zinc	0.022	J B	0.50	0.020	mg/L		12/06/16 14:16	12/07/16 14:46	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		12/06/16 14:13	12/07/16 20:44	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		12/06/16 14:16	12/07/16 19:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 19:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:24	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	☼	12/05/16 14:30	12/06/16 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/06/16 15:12	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-2

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.
^	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: 500-120882-2

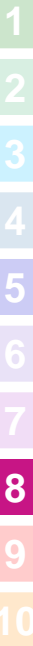
Laboratory: TestAmerica Chicago

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 #: 500-120882

Chain of Custody Number: EE46-12

Page _____ of _____

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments					
FE		1009008-0046													
Project Name		Lab Project #													
F74		S001274													
Project Location/State		Lab PM													
Rock Island County, IL		D. Wright													
Sampler															
S. Cooper															
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Voc	Svoc	Total Ar	Metals	Tox/Spup	PAH	Solids	pH	Other
			Date	Time											
4		1314V3-56-B03(0-3)	12-1-16	1035	2	S	X	X	X	X	X	X	X		
5		1314V3-56-B02(0-3)	12-1-16	1050	2	L	X	X	X	X	X	X	X		
6		1314V3-56-B02(0-3)D	12-1-16	1050	2	S	X	X	X	X	X	X	X		
7		1314V3-56-B01(0-3)	12-1-16	1105	2	S	X	X	X	X	X	X	X		

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 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>12-1-16</u>	Time: <u>1730</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CRT</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: 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: 500-120882-2

Login Number: 120882

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	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 <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):

622 19th Street (ISGS #1314V3-57)

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: 41.50686 Longitude: -90.50944
(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: 41.50686 Longitude: -90.50944

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 1314V3-57-B01, -B02, and -B03 were sampled within the construction zone adjacent to ISGS #1314V3-57 (Old Chamber Building). Refer to PSI Report for ISGS #1314V3-57 (Old Chamber Building) including Table 4-4, and Figures 4-4 and 4-16.

- 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 J120882-1.

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

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

3/17/17

Date:



P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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.

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.

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-57 (Old Chamber Building)			Comparison Criteria					
	1314V3-57-B01	1314V3-57-B02	1314V3-57-B03	MACs			TACO		
BORING	1314V3-57-B01 (0-3)	1314V3-57-B02 (0-3)	1314V3-57-B03 (0-5)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE									
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-3	0-3	0-5						
pH	8.1	8.4	8.7						
VOCs (None Detected)									
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	0.0098 J	ND U	--	--	--	--	--	--
Acenaphthene	0.012 J	0.016 J	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.006 J	ND U	--	--	--	--	--	--
Anthracene	0.036 J	0.034 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.18	0.12	0.012 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.22 †	0.16 †	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.33	0.17	0.021 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.078	0.074	ND U	--	--	--	--	--	--
Chrysene	0.21	0.11	0.013 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.034 J	0.026 J	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.43	0.22	0.021 J	3,100	--	--	3,100	82,000	--
Fluorene	0.014 J	0.014 J	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.094	0.082	0.014 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	0.023 J	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.26	0.14	0.0085 J	--	--	--	--	--	--
Pyrene	0.36	0.2	0.02 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	0.43 J	0.45 J	0.32 J	5	--	--	31	82	--
Arsenic	3.7	3.9	5 J	11.3	13	--	13	61	--
Barium	91	68	73 J	1,500	--	--	5,500	14,000	--
Beryllium	0.6	0.43	0.45	22	--	--	160	410	--
Boron	5.1	2.6	3 J	40	--	--	16,000	41,000	--
Cadmium	0.5	0.25	0.22 J	5.2	--	--	78	200	--
Calcium	7,200	14,000	11,000 J	--	--	--	--	--	--
Chromium	14	11	12	21	--	--	230	690	--
Cobalt	5.5	5.3	5.3 J	20	--	--	4,700	12,000	--
Copper	15	12	17 J	2,900	--	--	2,900	8,200	--
Iron	14,000	12,000	12,000	15,000	15,900	--	--	--	--
Lead	66	52	14 J	107	--	--	400	700	--
Magnesium	2,600	7,800	6,600 J	325,000	--	--	--	730,000	--
Manganese	330	370	360 J	630	636	--	1,600	4,100	--
Mercury	0.19	0.11	0.029	0.89	--	--	10	0.1	--
Nickel	13	12	11 J	100	--	--	1,600	4,100	--
Potassium	910	750	870 J	--	--	--	--	--	--
Selenium	0.38 J	ND U	ND UJ	1.3	--	--	390	1,000	--
Sodium	210	420	780	--	--	--	--	--	--
Thallium	0.78	0.72	0.77	2.6	--	--	6.3	160	--
Vanadium	17	18	20	550	--	--	550	1400	--
Zinc	85	47	33 J	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.48 J	0.75	0.59	--	--	--	--	--	2
Boron	0.11 J	0.064 J	0.072 J	--	--	--	--	--	2
Cadmium	ND U	0.002 J	0.0022 J	--	--	--	--	--	0.005
Lead	ND U	0.011 L	ND U	--	--	--	--	--	0.0075
Manganese	0.14	0.6 L	1.9 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	0.03	--	--	--	--	--	0.1
SPLP Metals (mg/L)									
Lead	NA	0.15 L	NA	--	--	--	--	--	0.0075
Manganese	NA	0.21 L	0.7 L	--	--	--	--	--	0.15

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-120882-1
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:
12/16/2016 5:05:36 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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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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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Job ID: 500-120882-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-120882-1

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

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. (500-120882-E-2-I MS) and (500-120882-E-2-J MSD)

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: 500-120882-1

Client Sample ID: 1314V3-57-B03 (0-5)

Lab Sample ID: 500-120882-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0085	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.021	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	0.012	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.021	J	0.038	0.0082	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
Antimony	0.32	J F1	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.0	F1	0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	73	F1	0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	3.0	F1	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22	F1	0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	11000	F2	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3	F1	0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	17	F1	0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14	F1	0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	6600	F2	5.5	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B F1	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	870	F1	28	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	780		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.77		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	33	F1	1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.040	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.70		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-57-B02 (0-3)

Lab Sample ID: 500-120882-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.023	J	0.037	0.0057	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0098	J	0.074	0.0068	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0060	J	0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.016	J	0.037	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.014	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.14		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.034	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.22		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.20		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.12		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: 500-120882-1

Client Sample ID: 1314V3-57-B02 (0-3) (Continued)

Lab Sample ID: 500-120882-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.11		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.17		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.075		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.16		0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.082		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.026	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.074		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	0.99	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.9		0.49	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	68		0.49	0.090	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6		2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25		0.099	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000		9.9	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.49	0.085	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.49	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		9.9	3.8	mg/Kg	1	☼	6010B	Total/NA
Lead	52		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7800		4.9	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.49	0.098	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.49	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	750		25	4.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	420		49	6.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.72		0.49	0.24	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.25	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		0.99	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.75		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.011		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.60		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.061	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.15		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.11		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: 1314V3-57-B01 (0-3)

Lab Sample ID: 500-120882-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.012	J	0.039	0.0071	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.014	J	0.039	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.26		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.036	J	0.039	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.43		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.36		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.18		0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.21		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.33		0.039	0.0085	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: 500-120882-1

Client Sample ID: 1314V3-57-B01 (0-3) (Continued)

Lab Sample ID: 500-120882-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	0.12		0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.22		0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.094		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.034	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.078		0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.43	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.7		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	91		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.60		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	5.1		3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.50		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	7200		12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.30	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	66		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2600		6.0	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	13	B	0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	910		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		60	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.78		0.60	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	85		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.075	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.19		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		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: 500-120882-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120882-1	1314V3-57-B03 (0-5)	Solid	12/01/16 09:25	12/02/16 10:10
500-120882-2	1314V3-57-B02 (0-3)	Solid	12/01/16 09:55	12/02/16 10:10
500-120882-3	1314V3-57-B01 (0-3)	Solid	12/01/16 10:15	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: 500-120882-1

Client Sample ID: 1314V3-57-B03 (0-5)

Lab Sample ID: 500-120882-1

Date Collected: 12/01/16 09:25

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 86.2

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	☼	12/02/16 16:10	12/06/16 13:39	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 13:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/02/16 16:10	12/06/16 13:39	1
Dibromofluoromethane	100		75 - 120	12/02/16 16:10	12/06/16 13:39	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/02/16 16:10	12/06/16 13:39	1
Toluene-d8 (Surr)	100		75 - 123	12/02/16 16:10	12/06/16 13:39	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 09:29	12/13/16 23:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B03 (0-5)

Lab Sample ID: 500-120882-1

Date Collected: 12/01/16 09:25

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 86.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Phenanthrene	0.0085	J	0.038	0.0053	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Fluoranthene	0.021	J	0.038	0.0070	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Pyrene	0.020	J	0.038	0.0075	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Benzo[a]anthracene	0.012	J	0.038	0.0051	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B03 (0-5)

Lab Sample ID: 500-120882-1

Date Collected: 12/01/16 09:25

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 86.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.013	J	0.038	0.010	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Benzo[b]fluoranthene	0.021	J	0.038	0.0082	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Indeno[1,2,3-cd]pyrene	0.014	J	0.038	0.0098	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	93		40 - 130	12/10/16 09:29	12/13/16 23:58	1
Phenol-d5	103		36 - 123	12/10/16 09:29	12/13/16 23:58	1
Nitrobenzene-d5	87		33 - 124	12/10/16 09:29	12/13/16 23:58	1
2-Fluorobiphenyl	82		42 - 115	12/10/16 09:29	12/13/16 23:58	1
2,4,6-Tribromophenol	60		25 - 130	12/10/16 09:29	12/13/16 23:58	1
Terphenyl-d14	96		25 - 150	12/10/16 09:29	12/13/16 23:58	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J F1	1.1	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Arsenic	5.0	F1	0.55	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Barium	73	F1	0.55	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Beryllium	0.45		0.22	0.048	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Boron	3.0	F1	2.8	0.39	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Cadmium	0.22	F1	0.11	0.032	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Calcium	11000	F2	11	3.6	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Chromium	12	B	0.55	0.095	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Cobalt	5.3	F1	0.28	0.063	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Copper	17	F1	0.55	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Iron	12000		11	4.3	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Lead	14	F1	0.28	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Magnesium	6600	F2	5.5	2.3	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Manganese	360		0.55	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Nickel	11	B F1	0.55	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Potassium	870	F1	28	4.5	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Selenium	<0.55	F1	0.55	0.27	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Sodium	780		55	7.3	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Thallium	0.77		0.55	0.27	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Vanadium	20		0.28	0.081	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
Zinc	33	F1	1.1	0.35	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:18	1
Boron	0.072	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:18	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B03 (0-5)

Lab Sample ID: 500-120882-1

Date Collected: 12/01/16 09:25

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 86.2

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 14:18	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Manganese	1.9		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Nickel	0.030		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
Zinc	0.040	J B	0.50	0.020	mg/L	-	12/06/16 14:16	12/07/16 14:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.70		0.025	0.010	mg/L	-	12/06/16 14:13	12/07/16 19:48	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 19:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:16	12/07/16 19:21	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 10:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.019	0.010	mg/Kg	☼	12/05/16 14:30	12/06/16 14:17	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 14:47	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B02 (0-3)

Lab Sample ID: 500-120882-2

Date Collected: 12/01/16 09:55

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	<0.018		0.018	0.0078	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Vinyl acetate	<0.0045		0.0045	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/02/16 16:10	12/06/16 14:04	1
Dibromofluoromethane	96		75 - 120	12/02/16 16:10	12/06/16 14:04	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/02/16 16:10	12/06/16 14:04	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 16:10	12/06/16 14:04	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	F1	0.19	0.082	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B02 (0-3)

Lab Sample ID: 500-120882-2

Date Collected: 12/01/16 09:55

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	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Naphthalene	0.023	J	0.037	0.0057	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Hexachlorocyclopentadiene	<0.74	F1	0.74	0.21	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2-Methylnaphthalene	0.0098	J	0.074	0.0068	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Acenaphthylene	0.0060	J	0.037	0.0049	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Acenaphthene	0.016	J	0.037	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Fluorene	0.014	J	0.037	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
4-Nitroaniline	<0.37	F1	0.37	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Hexachlorobenzene	<0.074		0.074	0.0086	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Pentachlorophenol	<0.74	F1	0.74	0.59	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Phenanthrene	0.14		0.037	0.0051	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Anthracene	0.034	J	0.037	0.0062	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Fluoranthene	0.22		0.037	0.0068	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Pyrene	0.20		0.037	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Benzo[a]anthracene	0.12		0.037	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B02 (0-3)

Lab Sample ID: 500-120882-2

Date Collected: 12/01/16 09:55

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	0.11		0.037	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Benzo[b]fluoranthene	0.17		0.037	0.0080	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Benzo[k]fluoranthene	0.075		0.037	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Benzo[a]pyrene	0.16		0.037	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Indeno[1,2,3-cd]pyrene	0.082		0.037	0.0096	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Dibenz(a,h)anthracene	0.026	J	0.037	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
Benzo[g,h,i]perylene	0.074		0.037	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	114		40 - 130	12/10/16 09:29	12/14/16 00:23	1
Phenol-d5	118		36 - 123	12/10/16 09:29	12/14/16 00:23	1
Nitrobenzene-d5	92		33 - 124	12/10/16 09:29	12/14/16 00:23	1
2-Fluorobiphenyl	91		42 - 115	12/10/16 09:29	12/14/16 00:23	1
2,4,6-Tribromophenol	67		25 - 130	12/10/16 09:29	12/14/16 00:23	1
Terphenyl-d14	108		25 - 150	12/10/16 09:29	12/14/16 00:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	0.99	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Arsenic	3.9		0.49	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Barium	68		0.49	0.090	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Beryllium	0.43		0.20	0.043	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Boron	2.6		2.5	0.35	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Cadmium	0.25		0.099	0.029	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Calcium	14000		9.9	3.2	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Chromium	11	B	0.49	0.085	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Cobalt	5.3		0.25	0.056	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Copper	12		0.49	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Iron	12000		9.9	3.8	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Lead	52		0.25	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Magnesium	7800		4.9	2.0	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Manganese	370		0.49	0.098	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Nickel	12	B	0.49	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Potassium	750		25	4.0	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Selenium	<0.49		0.49	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Silver	<0.25		0.25	0.058	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Sodium	420		49	6.5	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Thallium	0.72		0.49	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Vanadium	18		0.25	0.072	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
Zinc	47		0.99	0.31	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.75		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:22	1
Boron	0.064	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:22	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B02 (0-3)

Lab Sample ID: 500-120882-2

Date Collected: 12/01/16 09:55

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	0.0020	J	0.0050	0.0020	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Lead	0.011		0.0075	0.0075	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Manganese	0.60		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
Zinc	0.061	J B	0.50	0.020	mg/L	-	12/06/16 14:16	12/07/16 14:22	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.15		0.0075	0.0075	mg/L	-	12/06/16 14:13	12/07/16 19:55	1
Manganese	0.21		0.025	0.010	mg/L	-	12/06/16 14:13	12/07/16 19:55	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	-	12/06/16 14:16	12/07/16 19:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:16	12/07/16 19:25	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	-	12/06/16 13:45	12/07/16 10:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.018	0.0093	mg/Kg	☼	12/05/16 14:30	12/06/16 14:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		12/06/16 14:51	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B01 (0-3)

Lab Sample ID: 500-120882-3

Date Collected: 12/01/16 10:15

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0089	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Bromodichloromethane	<0.0020		0.0020	0.00042	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Bromoform	<0.0020		0.0020	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Chloroform	<0.0020		0.0020	0.00071	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Dibromochloromethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,2-Dichloropropane	<0.0020		0.0020	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00072	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Ethylbenzene	<0.0020		0.0020	0.00098	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Styrene	<0.0020		0.0020	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Tetrachloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Toluene	<0.0020		0.0020	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00072	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00088	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/02/16 16:10	12/06/16 14:29	1
Dibromofluoromethane	100		75 - 120	12/02/16 16:10	12/06/16 14:29	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/02/16 16:10	12/06/16 14:29	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 16:10	12/06/16 14:29	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	☼	12/10/16 09:29	12/14/16 02:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B01 (0-3)

Lab Sample ID: 500-120882-3

Date Collected: 12/01/16 10:15

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.0

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	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Acenaphthene	0.012	J	0.039	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Fluorene	0.014	J	0.039	0.0056	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Phenanthrene	0.26		0.039	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Anthracene	0.036	J	0.039	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Fluoranthene	0.43		0.039	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Pyrene	0.36		0.039	0.0078	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Benzo[a]anthracene	0.18		0.039	0.0053	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B01 (0-3)

Lab Sample ID: 500-120882-3

Date Collected: 12/01/16 10:15

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.21		0.039	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Benzo[b]fluoranthene	0.33		0.039	0.0085	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Benzo[k]fluoranthene	0.12		0.039	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Benzo[a]pyrene	0.22		0.039	0.0076	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Indeno[1,2,3-cd]pyrene	0.094		0.039	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Dibenz(a,h)anthracene	0.034 J		0.039	0.0076	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
Benzo[g,h,i]perylene	0.078		0.039	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		40 - 130	12/10/16 09:29	12/14/16 02:06	1
Phenol-d5	81		36 - 123	12/10/16 09:29	12/14/16 02:06	1
Nitrobenzene-d5	76		33 - 124	12/10/16 09:29	12/14/16 02:06	1
2-Fluorobiphenyl	72		42 - 115	12/10/16 09:29	12/14/16 02:06	1
2,4,6-Tribromophenol	31		25 - 130	12/10/16 09:29	12/14/16 02:06	1
Terphenyl-d14	88		25 - 150	12/10/16 09:29	12/14/16 02:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43 J		1.2	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Arsenic	3.7		0.60	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Barium	91		0.60	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Beryllium	0.60		0.24	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Boron	5.1		3.0	0.42	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Cadmium	0.50		0.12	0.035	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Calcium	7200		12	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Chromium	14 B		0.60	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Cobalt	5.5		0.30	0.068	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Copper	15		0.60	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Iron	14000		12	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Lead	66		0.30	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Magnesium	2600		6.0	2.4	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Manganese	330		0.60	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Nickel	13 B		0.60	0.16	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Potassium	910		30	4.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Selenium	0.38 J		0.60	0.30	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Sodium	210		60	7.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Thallium	0.78		0.60	0.29	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Vanadium	17		0.30	0.087	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
Zinc	85		1.2	0.38	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	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		12/06/16 14:16	12/07/16 14:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:27	1
Boron	0.11 J		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:27	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

Client Sample ID: 1314V3-57-B01 (0-3)

Lab Sample ID: 500-120882-3

Date Collected: 12/01/16 10:15

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 81.0

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	-	12/06/16 14:16	12/07/16 14:27	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Manganese	0.14		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:27	1
Zinc	0.075	J B	0.50	0.020	mg/L	-	12/06/16 14:16	12/07/16 14:27	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	-	12/06/16 14:16	12/07/16 19:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:16	12/07/16 19:28	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 10:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.018	0.0096	mg/Kg	☼	12/05/16 14:30	12/06/16 14:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU	-		12/06/16 14:58	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

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.
F1	MS and/or MSD Recovery 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.
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.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 500-120882-1

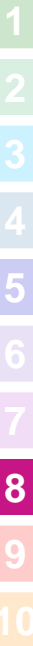
Laboratory: TestAmerica Chicago

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 6041
Phone: 708.534.5200 Fax: 708.534.5200



500-120882 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 #: 500-120882
Chain of Custody Number: E846-11
Page _____ of _____
Temperature °C of Cooler: 26.33

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
EE		1009008-0046-01									
Project Name		Lab Project #		Sampling		# of Containers		Matrix		Preservative Key	
FT4		SU012744		Date Time						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 Location/State		Lab PM		Date		Time					
Rock Island County, IL		D Wright		12-17-16		0925		2 S		VOC SVOC Total TA Metals Temp/Samp TA W/L pH/°C/Soil	
Sampler		Sample ID		Date		Time		# of Containers		Matrix	
S. Cooper		1314V3-57-B03(0-5)		12-17-16		0925		2 S		X X X X X	
		1314V3-57-B02(0-3)		12-17-16		0955		2 S		X X X X X	
		1314V3-57-B01(0-3)		12-17-16		1015		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	Company	Date	Time	Received By	Company	Date	Time
<i>[Signature]</i>	EE	12/16	1730	<i>[Signature]</i>	TIA-CHT	12/2/16	1010
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
Shipped: Fed-X
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: 500-120882-1

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	





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):

1924 6th Avenue (ISGS #1314V3-59)

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: 41.50732 Longitude: -90.50931

(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 Management Center.

Project Name: FAI 74 (I-74)

Latitude: 41.50732 Longitude: -90.50931

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):

Location 1314V3-59-B01 was sampled within the construction zone adjacent to ISGS #1314V3-59 (Residence). Refer to PSI Report for ISGS #1314V3-59 (Residence) including Table 4-4, and Figures 4-4 and 4-17.

- 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 J120882-3.

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
 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

3/17/17
 Date:



Analytical Data Summary
PTB #172-27; Work Order 46, Contract 64C08 - 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.

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 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-59 (Residence)		Comparison Criteria					
	1314V3-59-B01		MACs			TACO		
BORING	1314V3-59-B01		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-59-B01 (0-5)	1314V3-59-B01 (5-10)						
MATRIX	Soil	Soil						
DEPTH (feet)	0-5	5-10						
pH	8.2	8.3						
VOCs (None Detected)								
SVOCs (mg/kg)								
Benzo(a)anthracene	0.0075 J	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.009 J	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.016 J	ND U	0.9	2.1	1.5	2.1	170	--
Fluoranthene	0.014 J	ND U	3,100	--	--	3,100	82,000	--
Phenanthrene	0.0056 J	ND U	--	--	--	--	--	--
Pyrene	0.011 J	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	0.28 J	0.27 J	5	--	--	31	82	--
Arsenic	6.5	4.4	11.3	13	--	13	61	--
Boron	2.7	3.1	40	--	--	16,000	41,000	--
Cadmium	0.29	0.22	5.2	--	--	78	200	--
Calcium	7,400	23,000	--	--	--	--	--	--
Chromium	14	12	21	--	--	230	690	--
Cobalt	6.8	5.6	20	--	--	4,700	12,000	--
Copper	11	9.4	2,900	--	--	2,900	8,200	--
Iron	14,000	14,000	15,000	15,900	--	--	--	--
Lead	14	6.1	107	--	--	400	700	--
Magnesium	4,900	15,000	325,000	--	--	--	730,000	--
Manganese	460	190	630	636	--	1,600	4,100	--
Mercury	0.013 J	ND U	0.89	--	--	10	0.1	--
Nickel	15	9.8	100	--	--	1,600	4,100	--
Potassium	780	870	--	--	--	--	--	--
Selenium	ND U	1.6 †	1.3	--	--	390	1,000	--
Sodium	180	180	--	--	--	--	--	--
Thallium	1	0.57	2.6	--	--	6.3	160	--
Vanadium	27	21	550	--	--	550	1400	--
Zinc	36	26	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	0.56	0.57	--	--	--	--	--	2
Boron	0.063 J	0.075 J	--	--	--	--	--	2
Cobalt	ND U	0.035	--	--	--	--	--	1
Manganese	0.35 L	2.4 L	--	--	--	--	--	0.15
Nickel	ND U	0.034	--	--	--	--	--	0.1
Selenium	ND U	0.025 J	--	--	--	--	--	0.05
SPLP Metals (mg/L)								
Manganese	0.23 L	0.18 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: 500-120882-3
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 5:07:05 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

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Job ID: 500-120882-3

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-120882-3**

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: 500-120882-3

Client Sample ID: 1314V3-59-B01 (0-5)

Lab Sample ID: 500-120882-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0056	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.014	J	0.039	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.011	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0075	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.016	J	0.039	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0090	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.5		0.51	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	67		0.51	0.092	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7		2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.29		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	7400		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.51	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.8		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.25	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4900		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	15	B	0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	780		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		51	6.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	27		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.35		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.23		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-59-B01 (5-10)

Lab Sample ID: 500-120882-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.27	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.4		0.52	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.52	0.095	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.21	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	3.1		2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.52	0.089	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.6		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	9.4		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	6.1		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	15000		5.2	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	190		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: 500-120882-3

Client Sample ID: 1314V3-59-B01 (5-10) (Continued)

Lab Sample ID: 500-120882-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	9.8	B	0.52	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	870		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.6		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		52	6.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.57		0.52	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	26		1.0	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.075	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.025	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.026	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.18		0.025	0.010	mg/L	1		6010B	SPLP East
pH	8.3		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: 500-120882-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120882-8	1314V3-59-B01 (0-5)	Solid	12/01/16 11:30	12/02/16 10:10
500-120882-9	1314V3-59-B01 (5-10)	Solid	12/01/16 11:35	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: 500-120882-3

Client Sample ID: 1314V3-59-B01 (0-5)

Lab Sample ID: 500-120882-8

Date Collected: 12/01/16 11:30

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 80.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/02/16 16:10	12/07/16 11:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/02/16 16:10	12/07/16 11:59	1
Dibromofluoromethane	98		75 - 120	12/02/16 16:10	12/07/16 11:59	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/02/16 16:10	12/07/16 11:59	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 16:10	12/07/16 11:59	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Client Sample ID: 1314V3-59-B01 (0-5)

Lab Sample ID: 500-120882-8

Date Collected: 12/01/16 11:30

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Phenanthrene	0.0056	J	0.039	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Fluoranthene	0.014	J	0.039	0.0074	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Pyrene	0.011	J	0.039	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Benzo[a]anthracene	0.0075	J	0.039	0.0053	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Client Sample ID: 1314V3-59-B01 (0-5)

Lab Sample ID: 500-120882-8

Date Collected: 12/01/16 11:30

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Benzo[b]fluoranthene	0.016	J	0.039	0.0086	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Benzo[a]pyrene	0.0090	J	0.039	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		40 - 130	12/10/16 09:29	12/14/16 04:14	1
Phenol-d5	99		36 - 123	12/10/16 09:29	12/14/16 04:14	1
Nitrobenzene-d5	103		33 - 124	12/10/16 09:29	12/14/16 04:14	1
2-Fluorobiphenyl	92		42 - 115	12/10/16 09:29	12/14/16 04:14	1
2,4,6-Tribromophenol	67		25 - 130	12/10/16 09:29	12/14/16 04:14	1
Terphenyl-d14	103		25 - 150	12/10/16 09:29	12/14/16 04:14	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.0	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Arsenic	6.5		0.51	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Barium	67		0.51	0.092	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Beryllium	0.49		0.20	0.044	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Boron	2.7		2.5	0.35	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Cadmium	0.29		0.10	0.029	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Calcium	7400		10	3.3	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Chromium	14	B	0.51	0.087	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Cobalt	6.8		0.25	0.057	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Copper	11		0.51	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Iron	14000		10	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Lead	14		0.25	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Magnesium	4900		5.1	2.1	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Manganese	460		0.51	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Nickel	15	B	0.51	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Potassium	780		25	4.1	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Selenium	<0.51		0.51	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Sodium	180		51	6.7	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Thallium	1.0		0.51	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Vanadium	27		0.25	0.074	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
Zinc	36		1.0	0.32	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:51	1
Boron	0.063	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:51	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Client Sample ID: 1314V3-59-B01 (0-5)

Lab Sample ID: 500-120882-8

Date Collected: 12/01/16 11:30

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 80.9

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		12/06/16 14:16	12/07/16 14:51	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:51	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:51	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 14:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 14:51	1
Manganese	0.35		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:51	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:51	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 14:51	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:51	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 14:51	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.23		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 20:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:16	12/07/16 19:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 19:45	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.019	0.0098	mg/Kg	☼	12/05/16 14:30	12/06/16 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/06/16 15:16	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Client Sample ID: 1314V3-59-B01 (5-10)

Lab Sample ID: 500-120882-9

Date Collected: 12/01/16 11:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 77.9

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	☼	12/02/16 16:10	12/06/16 16:58	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/02/16 16:10	12/06/16 16:58	1
Dibromofluoromethane	97		75 - 120	12/02/16 16:10	12/06/16 16:58	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/02/16 16:10	12/06/16 16:58	1
Toluene-d8 (Surr)	99		75 - 123	12/02/16 16:10	12/06/16 16:58	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	☼	12/10/16 09:29	12/14/16 04:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Client Sample ID: 1314V3-59-B01 (5-10)

Lab Sample ID: 500-120882-9

Date Collected: 12/01/16 11:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 77.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2-Methylnaphthalene	<0.082		0.082	0.0074	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.32	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Client Sample ID: 1314V3-59-B01 (5-10)

Lab Sample ID: 500-120882-9

Date Collected: 12/01/16 11:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 77.9

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	☼	12/10/16 09:29	12/14/16 04:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 04:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		40 - 130	12/10/16 09:29	12/14/16 04:40	1
Phenol-d5	82		36 - 123	12/10/16 09:29	12/14/16 04:40	1
Nitrobenzene-d5	79		33 - 124	12/10/16 09:29	12/14/16 04:40	1
2-Fluorobiphenyl	67		42 - 115	12/10/16 09:29	12/14/16 04:40	1
2,4,6-Tribromophenol	55		25 - 130	12/10/16 09:29	12/14/16 04:40	1
Terphenyl-d14	84		25 - 150	12/10/16 09:29	12/14/16 04:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	1.0	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Arsenic	4.4		0.52	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Barium	48		0.52	0.095	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Beryllium	0.45		0.21	0.045	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Boron	3.1		2.6	0.36	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Cadmium	0.22		0.10	0.030	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Calcium	23000		10	3.3	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Chromium	12	B	0.52	0.089	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Cobalt	5.6		0.26	0.058	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Copper	9.4		0.52	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Iron	14000		10	4.0	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Lead	6.1		0.26	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Magnesium	15000		5.2	2.1	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Manganese	190		0.52	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Nickel	9.8	B	0.52	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Potassium	870		26	4.2	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Selenium	1.6		0.52	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Sodium	180		52	6.8	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Thallium	0.57		0.52	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Vanadium	21		0.26	0.075	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	1
Zinc	26		1.0	0.33	mg/Kg	☼	12/07/16 08:30	12/07/16 18:02	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 14:16	12/07/16 14:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:56	1
Boron	0.075	J	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:56	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

Client Sample ID: 1314V3-59-B01 (5-10)

Lab Sample ID: 500-120882-9

Date Collected: 12/01/16 11:35

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 77.9

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		12/06/16 14:16	12/07/16 14:56	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:56	1
Cobalt	0.035		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:56	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 14:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 14:56	1
Manganese	2.4		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:56	1
Nickel	0.034		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:56	1
Selenium	0.025 J		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 14:56	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:56	1
Zinc	0.026 J B		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 14:56	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.18		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 20:58	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		12/06/16 14:16	12/07/16 19:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 19:56	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 10:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	0.010	mg/Kg	☼	12/05/16 14:30	12/06/16 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/06/16 15:19	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-3

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: 500-120882-3

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

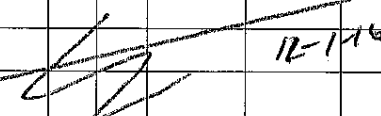
2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

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 #: 500-1208P2
 Chain of Custody Number: EE46-13
 Page _____ of _____
 Temperature °C of Cooler: _____

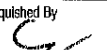
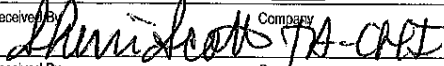
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Project Name		Lab Project #		Date		Time		# of Containers		Matrix	
I 74		50012744									
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix	
Rock Island County, IL		D Wright									
Sampler		Lab PM		Date		Time		# of Containers		Matrix	
S Cooper		D Wright									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
8		1314VJ-59-B01 (0-5)	12-16	1130	2 S		VOL	SUG	TOTAL TRC	TRC Multi	TRC Multi
9		1314VJ-59-B01 (5-70)	12-16	1135	2 S				TRC Multi	TRC Multi	PAR/40 Solids
											64008


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	12-16	1731		TA-CRT	12/2/16	1010
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
 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: 500-120882-3

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	





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):

2000 block of 6th Avenue (ISGS #1314V3-60)

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: 41.50765 Longitude: -90.50799

(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 Management Center.

Project Name: FAI 74 (I-74)

Latitude: 41.50765 Longitude: -90.50799

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 1314V3-60-B01 through -B05 and 1314V3-01-B10 and -B11 were sampled within the construction zone adjacent to ISGS #1314V3-60 (Vacant Lot). Refer to PSI Report for ISGS #1314V3-60 (Vacant Lot) including Table 4-4, and Figures 4-4, 4-16, and 4-17.

- 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 J121005-1, J121005-2, and J121163-1.

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

3/17/17

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 64C08 - 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.

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 64C08 - IDOT Job # P-93-032-01
CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-60 (Vacant Lot)					Comparison Criteria					
	1314V3-60-B01		1314V3-60-B02	1314V3-60-B03		MACs			TACO		
BORING	1314V3-60-B01 (0-6)	1314V3-60-B01 (6-11)	1314V3-60-B02 (0-7)	1314V3-60-B03 (0-4)	1314V3-60-B03 (4-9)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-11	0-7	0-4	4-9						
DEPTH (feet)	7.6	7.6	8	7.5	7.5						
pH											
VOCs (None Detected)											
SVOCs (mg/kg)											
Anthracene	ND U	ND U	0.011 J	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	ND U	0.11	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	0.13 ↑	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	0.23	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	0.1	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	0.081	ND U	ND U	9	--	--	9	1,700	--
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	ND U	0.17	ND U	ND U	88	--	--	88	17,000	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	ND U	0.3	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	0.091	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	ND U	ND U	0.085	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	ND U	0.24	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	ND U	ND U	0.32 J	ND U	ND U	5	--	--	31	82	--
Arsenic	2.7	3.8	3.6	2.5	3.1	11.3	13	--	13	61	--
Barium	49	86	82	76	62	1,500	--	--	5,500	14,000	--
Beryllium	0.36	0.55	0.48	0.45	0.41	22	--	--	160	410	--
Boron	1.7 J	2 J	2.5 J	2.2 J	1.6 J	40	--	--	16,000	41,000	--
Cadmium	0.18	0.2	0.44	0.32	0.16	5.2	--	--	78	200	--
Calcium	3,000	5,000	54,000	3,700	2,600	--	--	--	--	--	--
Chromium	9.2	16	11	10	10	21	--	--	230	690	--
Cobalt	4.5	7.6	8.5	5.4	5.5	20	--	--	4,700	12,000	--
Copper	7.7	13	11	10	9.4	2,900	--	--	2,900	8,200	--
Iron	9,100	14,000	11,000	10,000	11,000	15,000	15,900	--	--	--	--
Lead	23	8.6	72	15	8.6	107	--	--	400	700	--
Magnesium	1,500	4,700	1,800	1,500	1,700	325,000	--	--	--	730,000	--
Manganese	180	330	530	260	160	630	636	--	1,600	4,100	--
Mercury	0.042	0.029	0.076	0.031	0.022	0.89	--	--	10	0.1	--
Nickel	10	19	17	14	11	100	--	--	1,600	4,100	--
Potassium	530	850	830	670	650	--	--	--	--	--	--
Selenium	0.48 J	0.33 J	0.5 J	0.59	ND U	1.3	--	--	390	1,000	--
Sodium	41 J	120	63	43 J	42 J	--	--	--	--	--	--
Vanadium	12	19	14	14	13	550	--	--	550	1,400	--
Zinc	38	45	75	110	37	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.22 J	0.45 J	0.34 J	0.27 J	0.22 J	--	--	--	--	--	2
Boron	0.11 J	0.11 J	0.068 J	0.073 J	ND U	--	--	--	--	--	2
Iron	0.27 J	ND U	ND U	ND U	0.32 J	--	--	--	--	--	5
Lead	ND U	ND U	0.021 L	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.042	ND U	0.13	0.013 J	ND U	--	--	--	--	--	0.15
Zinc	0.022 J	ND U	0.082 J	0.092 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Lead	NA	NA	0.11 L	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	NA	NA	NA	NA	--	--	--	--	--	0.15

PTB #172-27; Work Order 46, Contract 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-60 (Vacant Lot)			Comparison Criteria						
	1314V3-60-B04	1314V3-60-B05		MACs			TACO			
BORING										
SAMPLE	1314V3-60-B04 (0-5)	1314V3-60-B05 (0-6)	1314V3-60-B05 (6-12)							
MATRIX	Soil	Soil	Soil							
DEPTH (feet)	0-5	0-6	6-12							
pH	8.9	8.2	7.8	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	
VOCs (None Detected)										
SVOCs (mg/kg)										
Anthracene	0.0084 J	ND U	ND U	12,000	--	--	23,000	610,000	--	
Benzo(a)anthracene	0.036 J	0.011 J	0.02 J	0.9	1.8	1.1	1.8	170	--	
Benzo(a)pyrene	0.043 J	0.016 J	0.032 J	0.09	2.1	1.3	2.1	17	--	
Benzo(b)fluoranthene	0.054 J	0.028 J	0.057	0.9	2.1	1.5	2.1	170	--	
Benzo(g,h,i)perylene	0.051 J	0.019 J	0.037 J	--	--	--	--	--	--	
Benzo(k)fluoranthene	0.04 J	0.013 J	0.023 J	9	--	--	9	1,700	--	
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--	
Chrysene	0.045	0.02 J	0.041 J	88	--	--	88	17,000	--	
Dibenzofuran	ND U	ND U	ND U	--	--	--	--	--	--	
Fluoranthene	0.079	0.027 J	0.064	3,100	--	--	3,100	82,000	--	
Fluorene	ND U	ND U	ND U	560	--	--	3,100	82,000	--	
Indeno(1,2,3-cd)pyrene	0.028 J	0.015 J	0.029 J	0.9	1.6	0.9	1.6	170	--	
Phenanthrene	0.052	0.0059 J	0.012 J	--	--	--	--	--	--	
Pyrene	0.092	0.023 J	0.051	2,300	--	--	2,300	61,000	--	
Inorganics (mg/kg)										
Antimony	ND U	ND U	ND U	5	--	--	31	82	--	
Arsenic	3.1	2.2	2.9	11.3	13	--	13	61	--	
Barium	75	70	72	1,500	--	--	5,500	14,000	--	
Beryllium	0.44	0.48	0.5	22	--	--	160	410	--	
Boron	1.8 J	1.6 J	1.8 J	40	--	--	16,000	41,000	--	
Cadmium	0.26	0.24	0.21	5.2	--	--	78	200	--	
Calcium	18,000	3,300	3,600	--	--	--	--	--	--	
Chromium	12	11	13	21	--	--	230	690	--	
Cobalt	6.1	7	7	20	--	--	4,700	12,000	--	
Copper	9.1	9.5	10	2,900	--	--	2,900	8,200	--	
Iron	11,000	11,000	13,000	15,000	15,900	--	--	--	--	
Lead	26	13	10	107	--	--	400	700	--	
Magnesium	7,000	1,800	2,700	325,000	--	--	--	730,000	--	
Manganese	380	300	280	630	636	--	1,600	4,100	--	
Mercury	0.029	0.034	0.029	0.89	--	--	10	0.1	--	
Nickel	14	15	15	100	--	--	1,600	4,100	--	
Potassium	550	750	770	--	--	--	--	--	--	
Selenium	0.47 J	0.32 J	ND U	1.3	--	--	390	1,000	--	
Sodium	290	120	130	--	--	--	--	--	--	
Vanadium	16	12	16	550	--	--	550	1400	--	
Zinc	45	46	43	5,100	--	--	23,000	61,000	--	
TCLP Metals (mg/L)										
Barium	0.74	0.24 J	0.38 J	--	--	--	--	--	2	
Boron	0.068 J	0.065 J	0.06 J	--	--	--	--	--	2	
Iron	ND U	ND U	ND U	--	--	--	--	--	5	
Lead	ND U	ND U	ND U	--	--	--	--	--	0.0075	
Manganese	1.8 L	ND U	0.042	--	--	--	--	--	0.15	
Zinc	0.049 J	ND U	ND U	--	--	--	--	--	5	
SPLP Metals (mg/L)										
Lead	NA	NA	NA	--	--	--	--	--	0.0075	
Manganese	0.49 L	NA	NA	--	--	--	--	--	0.15	

PTB #172-27; Work Order 46, Contract 64C08 - IDOT Job # P-93-032-01

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-1 (IDOT ROW)			Comparison Criteria						
	1314V3-01-B10	1314V3-01-B11		MACs			TACO			
BORING	1314V3-01-B10 (0-6)	1314V3-01-B11 (0-8)	1314V3-01-B11 (8-15)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	Groundwater
SAMPLE	1314V3-01-B10 (0-6)	1314V3-01-B11 (0-8)	1314V3-01-B11 (8-15)							
MATRIX	Soil	Soil	Soil							
DEPTH (feet)	0-6	0-8	8-15							
pH	8.6	8.3	8.6							
VOCs (None Detected)										
SVOCs (mg/kg)										
Benzo(a)anthracene	0.043	ND U	ND U	0.9	1.8	1.1	1.8	170	--	0.00013
Benzo(a)pyrene	0.057	ND U	ND U	0.09	2.1	1.3	2.1	17	--	0.0002
Benzo(b)fluoranthene	0.073	ND U	ND U	0.9	2.1	1.5	2.1	170	--	0.00018
Benzo(g,h,i)perylene	0.044	ND U	ND U	--	--	--	--	--	--	--
Benzo(k)fluoranthene	0.026 J	ND U	ND U	9	--	--	9	1,700	--	0.00017
Chrysene	0.046	ND U	ND U	88	--	--	88	17,000	--	0.0015
Dibenz(a,h)anthracene	0.01 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--	0.0003
Fluoranthene	0.063	ND U	ND U	3,100	--	--	3,100	82,000	--	0.28
Phenanthrene	0.026 J	ND U	ND U	--	--	--	--	--	--	--
Pyrene	0.068	ND U	ND U	2300	--	--	2,300	61,000	--	0.21
Inorganics (mg/kg)										
Arsenic	4	3.1	3.7	11.3	13	--	13	61	--	0.05
Barium	54	68	58	1,500	--	--	5,500	14,000	--	2
Beryllium	0.54	0.42	0.38	22	--	--	160	410	--	0.004
Boron	1.7 J	2.3 J	2.1 J	40	--	--	16,000	41,000	--	2
Cadmium	0.24	0.23	0.2	5.2	--	--	78	200	--	0.005
Calcium	23,000	3,400	13,000	--	--	--	--	--	--	--
Chromium	12	11	11	21	--	--	230	690	--	0.1
Cobalt	6.9	5.2	5.2	20	--	--	4,700	12,000	--	1
Copper	12	9	8.4	2,900	--	--	2,900	8,200	--	0.65
Iron	12,000	10,000	11,000	15,000	15,900	--	--	--	--	5
Lead	24	13	7.5	107	--	--	400	700	--	0.0075
Magnesium	13,000	1,900	8,500	325,000	--	--	--	730,000	--	--
Manganese	280	220	210	630	636	--	1,600	4,100	--	0.15
Mercury	0.038	0.029	0.026	0.89	--	--	10	0.1	--	0.002
Nickel	24	12	13	100	--	--	1,600	4,100	--	0.1
Potassium	560	610	550	--	--	--	--	--	--	--
Selenium	ND U	0.34 J	ND U	1.3	--	--	390	1,000	--	0.05
Sodium	350	540	840	--	--	--	--	--	--	--
Vanadium	18	14	18	550	--	--	550	1,400	--	0.049
Zinc	52	41	38	5,100	--	--	23,000	61,000	--	5
TCLP Metals (mg/L)										
Barium	0.8	0.22 J	0.48 J	--	--	--	--	--	2	--
Boron	0.055 J	0.082 J	0.063 J	--	--	--	--	--	2	--
Manganese	0.41 L	0.014 J	0.73 L	--	--	--	--	--	0.15	--
Nickel	0.026	ND U	0.011 J	--	--	--	--	--	0.1	--
SPLP Metals (mg/L)										
Manganese	0.4 L	NA	0.71 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: 500-121005-1
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:
12/20/2016 2:30:25 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
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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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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Job ID: 500-121005-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-121005-1

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

Method(s) 8270D: Perylene-d12 Internal standard (ISTD) response for the following samples was outside of acceptance limits. The sample was run a second time with concurring results. Results with the highest ISTD recovery have been reported 1314V3-60-B04 (0-5) (500-121005-7).

Method(s) 8270D: The following samples contained one acid surrogate outside acceptance limits: 1314V3-60-B06 (0-6) (500-121005-3), 1314V3-60-B03 (4-9) (500-121005-9), (500-121005-E-3-I MS) and (500-121005-E-3-J MSD). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-121005-E-3-I MS) and (500-121005-E-3-J MSD)

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 Terbium(Tb) was used to report the element Thallium (Tl), in batch 364634, because the icp digestion spike was used for the prep of the samples. The icp digestion spike contains the element Bismuth (Bi) in the spike.

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: 500-121005-1

Client Sample ID: 1314V3-60-B01 (0-6)

Lab Sample ID: 500-121005-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.7		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	49		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.36		0.23	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	3000		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.2	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.5		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	7.7		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	9100		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1500		5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	180		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	10		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	530		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	41	J	58	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA
Zinc	38		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.22	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.27	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.022	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.042		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-60-B01 (6-11)

Lab Sample ID: 500-121005-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.8		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	86		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	5000		12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	16	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.6		0.30	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	8.6		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4700		6.0	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	850		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		60	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.30	0.088	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	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: 500-121005-1

Client Sample ID: 1314V3-60-B01 (6-11) (Continued)

Lab Sample ID: 500-121005-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.029		0.019	0.010	mg/Kg	1	*	7471B	Total/NA
pH	7.6		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: 500-121005-1



Client Sample ID: 1314V3-60-B05 (0-6)

Lab Sample ID: 500-121005-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0059	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.027	J	0.040	0.0075	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.011	J	0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.020	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.028	J	0.040	0.0087	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.013	J	0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.016	J	0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.019	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.2		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.60	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.24	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	1.6	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	3300		12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.60	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.30	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	9.5		0.60	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		6.0	2.4	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: 500-121005-1

Client Sample ID: 1314V3-60-B05 (0-6) (Continued)

Lab Sample ID: 500-121005-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	300		0.60	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	750		30	4.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.32	J	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		60	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.30	0.088	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.24	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.034		0.021	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-60-B05 (6-12)

Lab Sample ID: 500-121005-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.012	J	0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.064		0.042	0.0078	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.051		0.042	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.020	J	0.042	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.041	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.057		0.042	0.0091	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.023	J	0.042	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.032	J	0.042	0.0081	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.029	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.037	J	0.042	0.014	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.9		0.62	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	72		0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.25	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	3.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.12	0.036	mg/Kg	1	☼	6010B	Total/NA
Calcium	3600		12	4.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.31	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.62	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		12	4.8	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2700		6.2	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.62	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		31	5.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	130		62	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.31	0.090	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.060	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.029		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: 1314V3-60-B04 (0-5)

Lab Sample ID: 500-121005-7

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: 500-121005-1

Client Sample ID: 1314V3-60-B04 (0-5) (Continued)

Lab Sample ID: 500-121005-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.052		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0084	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.079		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.092		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.036	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.045		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.054		0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.040		0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.043		0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.028	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0090	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.051		0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.1		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	75		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	18000		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	9.1		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	26		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	550		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	290		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.049	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.49		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-60-B03 (0-4)

Lab Sample ID: 500-121005-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.5		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	76		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	2.2	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.32		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	3700		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.4		0.29	0.066	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: 500-121005-1

Client Sample ID: 1314V3-60-B03 (0-4) (Continued)

Lab Sample ID: 500-121005-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	10		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1500		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	260		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	670		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	43	J	59	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.29	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	110		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.092	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.031		0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-60-B03 (4-9)

Lab Sample ID: 500-121005-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	62		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	1.6	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	2600		12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	9.4		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	8.6		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1700		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	160		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	650		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Sodium	42	J	59	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.29	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	37		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.22	J	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.32	J	0.40	0.20	mg/L	1		6010B	TCLP
Mercury	0.022		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: 1314V3-60-B02 (0-7)

Lab Sample ID: 500-121005-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.085		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.011	J	0.041	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.30		0.041	0.0076	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: 500-121005-1

Client Sample ID: 1314V3-60-B02 (0-7) (Continued)

Lab Sample ID: 500-121005-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.24		0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.11		0.041	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.17		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.23		0.041	0.0088	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.081		0.041	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.041	0.0079	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.091		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.027	J	0.041	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.10		0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.32	J	1.2	0.26	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.6		0.62	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	82		0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.25	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	3.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.44		0.12	0.036	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000		120	40	mg/Kg	10	☼	6010B	Total/NA
Chromium	11	B	0.62	0.11	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.5		0.31	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.62	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		12	4.8	mg/Kg	1	☼	6010B	Total/NA
Lead	72		0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		6.2	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	530		0.62	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	830		31	5.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.50	J	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Sodium	63		62	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.31	0.090	mg/Kg	1	☼	6010B	Total/NA
Zinc	75		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.021		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.082	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.11		0.0075	0.0075	mg/L	1		6010B	SPLP East
Mercury	0.076		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		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: 500-121005-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121005-1	1314V3-60-B01 (0-6)	Solid	12/05/16 12:40	12/06/16 10:30
500-121005-2	1314V3-60-B01 (6-11)	Solid	12/05/16 12:45	12/06/16 10:30
500-121005-5	1314V3-60-B05 (0-6)	Solid	12/05/16 13:35	12/06/16 10:30
500-121005-6	1314V3-60-B05 (6-12)	Solid	12/05/16 13:40	12/06/16 10:30
500-121005-7	1314V3-60-B04 (0-5)	Solid	12/05/16 13:55	12/06/16 10:30
500-121005-8	1314V3-60-B03 (0-4)	Solid	12/05/16 14:10	12/06/16 10:30
500-121005-9	1314V3-60-B03 (4-9)	Solid	12/05/16 14:15	12/06/16 10:30
500-121005-10	1314V3-60-B02 (0-7)	Solid	12/05/16 14:30	12/06/16 10:30

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (0-6)

Lab Sample ID: 500-121005-1

Date Collected: 12/05/16 12:40

Matrix: Solid

Date Received: 12/06/16 10:30

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	0.0077	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/06/16 13:50	12/07/16 14:30	1
Dibromofluoromethane	103		75 - 120	12/06/16 13:50	12/07/16 14:30	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/06/16 13:50	12/07/16 14:30	1
Toluene-d8 (Surr)	101		75 - 123	12/06/16 13:50	12/07/16 14:30	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	☼	12/12/16 09:38	12/13/16 19:47	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (0-6)

Lab Sample ID: 500-121005-1

Date Collected: 12/05/16 12:40

Matrix: Solid

Date Received: 12/06/16 10:30

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	<0.19		0.19	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (0-6)

Lab Sample ID: 500-121005-1

Date Collected: 12/05/16 12:40

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/12/16 09:38	12/13/16 19:47	1
Phenol-d5	93		36 - 123	12/12/16 09:38	12/13/16 19:47	1
Nitrobenzene-d5	88		33 - 124	12/12/16 09:38	12/13/16 19:47	1
2-Fluorobiphenyl	87		42 - 115	12/12/16 09:38	12/13/16 19:47	1
2,4,6-Tribromophenol	86		25 - 130	12/12/16 09:38	12/13/16 19:47	1
Terphenyl-d14	101		25 - 150	12/12/16 09:38	12/13/16 19:47	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	☼	12/08/16 15:09	12/09/16 13:34	1
Arsenic	2.7		0.58	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Barium	49		0.58	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Beryllium	0.36		0.23	0.051	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Boron	1.7 J		2.9	0.41	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Cadmium	0.18		0.12	0.034	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Calcium	3000		12	3.8	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Chromium	9.2 B		0.58	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Cobalt	4.5		0.29	0.066	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Copper	7.7		0.58	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Iron	9100		12	4.5	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Lead	23		0.29	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Magnesium	1500		5.8	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Manganese	180		0.58	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Nickel	10		0.58	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Potassium	530		29	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Selenium	0.48 J		0.58	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Sodium	41 J		58	7.7	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Vanadium	12		0.29	0.085	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
Zinc	38		1.2	0.37	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.22 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 17:18	1
Boron	0.11 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:18	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (0-6)

Lab Sample ID: 500-121005-1

Date Collected: 12/05/16 12:40

Matrix: Solid

Date Received: 12/06/16 10:30

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	-	12/08/16 14:21	12/10/16 17:18	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Iron	0.27	J	0.40	0.20	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Manganese	0.042		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Silver	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:18	1
Zinc	0.022	J	0.50	0.020	mg/L	-	12/08/16 14:21	12/10/16 17:18	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 16:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/08/16 14:21	12/09/16 16:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/08/16 12:45	12/09/16 09:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.018	0.0095	mg/Kg	☼	12/07/16 14:45	12/08/16 10:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU	-		12/09/16 18:57	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (6-11)

Lab Sample ID: 500-121005-2

Date Collected: 12/05/16 12:45

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/06/16 13:50	12/07/16 14:55	1
Dibromofluoromethane	99		75 - 120	12/06/16 13:50	12/07/16 14:55	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/06/16 13:50	12/07/16 14:55	1
Toluene-d8 (Surr)	101		75 - 123	12/06/16 13:50	12/07/16 14:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.091	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (6-11)

Lab Sample ID: 500-121005-2

Date Collected: 12/05/16 12:45

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Fluoranthene	<0.040		0.040	0.0076	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (6-11)

Lab Sample ID: 500-121005-2

Date Collected: 12/05/16 12:45

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		40 - 130	12/12/16 09:38	12/13/16 20:16	1
Phenol-d5	89		36 - 123	12/12/16 09:38	12/13/16 20:16	1
Nitrobenzene-d5	84		33 - 124	12/12/16 09:38	12/13/16 20:16	1
2-Fluorobiphenyl	83		42 - 115	12/12/16 09:38	12/13/16 20:16	1
2,4,6-Tribromophenol	93		25 - 130	12/12/16 09:38	12/13/16 20:16	1
Terphenyl-d14	101		25 - 150	12/12/16 09:38	12/13/16 20:16	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	☼	12/08/16 15:09	12/09/16 13:37	1
Arsenic	3.8		0.60	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Barium	86		0.60	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Beryllium	0.55		0.24	0.052	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Boron	2.0	J	3.0	0.42	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Cadmium	0.20		0.12	0.035	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Calcium	5000		12	3.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Chromium	16	B	0.60	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Cobalt	7.6		0.30	0.068	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Copper	13		0.60	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Iron	14000		12	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Lead	8.6		0.30	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Magnesium	4700		6.0	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Manganese	330		0.60	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Nickel	19		0.60	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Potassium	850		30	4.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Selenium	0.33	J	0.60	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Sodium	120		60	7.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Vanadium	19		0.30	0.088	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
Zinc	45		1.2	0.38	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 17:25	1
Boron	0.11	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B01 (6-11)

Lab Sample ID: 500-121005-2

Date Collected: 12/05/16 12:45

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 17:25	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:25	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:25	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 17:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 17:25	1
Manganese	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:25	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:25	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 17:25	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:25	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 17:25	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 16:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 16:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/08/16 12:45	12/09/16 09:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.019	0.010	mg/Kg	✱	12/07/16 14:45	12/08/16 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/09/16 19:03	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (0-6)

Lab Sample ID: 500-121005-5

Date Collected: 12/05/16 13:35

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.6

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	☼	12/06/16 13:50	12/07/16 16:09	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1
Xylenes, Total	<0.0040		0.0040	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/06/16 13:50	12/07/16 16:09	1
Dibromofluoromethane	98		75 - 120	12/06/16 13:50	12/07/16 16:09	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/06/16 13:50	12/07/16 16:09	1
Toluene-d8 (Surr)	104		75 - 123	12/06/16 13:50	12/07/16 16:09	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	☼	12/12/16 09:38	12/13/16 21:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (0-6)

Lab Sample ID: 500-121005-5

Date Collected: 12/05/16 13:35

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.6

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	☼	12/12/16 09:38	12/13/16 21:14	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Phenanthrene	0.0059	J	0.040	0.0056	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Fluoranthene	0.027	J	0.040	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Pyrene	0.023	J	0.040	0.0080	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Benzo[a]anthracene	0.011	J	0.040	0.0055	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (0-6)

Lab Sample ID: 500-121005-5

Date Collected: 12/05/16 13:35

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.020	J	0.040	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Benzo[b]fluoranthene	0.028	J	0.040	0.0087	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Benzo[k]fluoranthene	0.013	J	0.040	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Benzo[a]pyrene	0.016	J	0.040	0.0078	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Indeno[1,2,3-cd]pyrene	0.015	J	0.040	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
Benzo[g,h,i]perylene	0.019	J	0.040	0.013	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		40 - 130	12/12/16 09:38	12/13/16 21:14	1
Phenol-d5	82		36 - 123	12/12/16 09:38	12/13/16 21:14	1
Nitrobenzene-d5	75		33 - 124	12/12/16 09:38	12/13/16 21:14	1
2-Fluorobiphenyl	75		42 - 115	12/12/16 09:38	12/13/16 21:14	1
2,4,6-Tribromophenol	79		25 - 130	12/12/16 09:38	12/13/16 21:14	1
Terphenyl-d14	92		25 - 150	12/12/16 09:38	12/13/16 21:14	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	☼	12/08/16 15:09	12/09/16 13:58	1
Arsenic	2.2		0.60	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Barium	70		0.60	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Beryllium	0.48		0.24	0.052	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Boron	1.6	J	3.0	0.42	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Cadmium	0.24		0.12	0.035	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Calcium	3300		12	3.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Chromium	11	B	0.60	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Cobalt	7.0		0.30	0.068	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Copper	9.5		0.60	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Iron	11000		12	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Lead	13		0.30	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Magnesium	1800		6.0	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Manganese	300		0.60	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Nickel	15		0.60	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Potassium	750		30	4.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Selenium	0.32	J	0.60	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Sodium	120		60	7.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Vanadium	12		0.30	0.088	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
Zinc	46		1.2	0.38	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 17:45	1
Boron	0.065	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (0-6)

Lab Sample ID: 500-121005-5

Date Collected: 12/05/16 13:35

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.6

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 17:45	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:45	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:45	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 17:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 17:45	1
Manganese	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:45	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:45	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 17:45	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:45	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 17:45	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 16:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 16:52	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 09:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.021	0.011	mg/Kg	✱	12/07/16 14:45	12/08/16 11:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/09/16 19:14	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (6-12)

Lab Sample ID: 500-121005-6

Date Collected: 12/05/16 13:40

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.0

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	☼	12/06/16 13:50	12/07/16 16:34	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/06/16 13:50	12/07/16 16:34	1
Dibromofluoromethane	99		75 - 120	12/06/16 13:50	12/07/16 16:34	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/06/16 13:50	12/07/16 16:34	1
Toluene-d8 (Surr)	104		75 - 123	12/06/16 13:50	12/07/16 16:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (6-12)

Lab Sample ID: 500-121005-6

Date Collected: 12/05/16 13:40

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.0

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	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Phenanthrene	0.012	J	0.042	0.0059	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Fluoranthene	0.064		0.042	0.0078	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Pyrene	0.051		0.042	0.0084	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Benzo[a]anthracene	0.020	J	0.042	0.0057	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (6-12)

Lab Sample ID: 500-121005-6

Date Collected: 12/05/16 13:40

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.041	J	0.042	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Benzo[b]fluoranthene	0.057		0.042	0.0091	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Benzo[k]fluoranthene	0.023	J	0.042	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Benzo[a]pyrene	0.032	J	0.042	0.0081	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Indeno[1,2,3-cd]pyrene	0.029	J	0.042	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
Benzo[g,h,i]perylene	0.037	J	0.042	0.014	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		40 - 130	12/12/16 09:38	12/13/16 21:43	1
Phenol-d5	87		36 - 123	12/12/16 09:38	12/13/16 21:43	1
Nitrobenzene-d5	75		33 - 124	12/12/16 09:38	12/13/16 21:43	1
2-Fluorobiphenyl	75		42 - 115	12/12/16 09:38	12/13/16 21:43	1
2,4,6-Tribromophenol	64		25 - 130	12/12/16 09:38	12/13/16 21:43	1
Terphenyl-d14	94		25 - 150	12/12/16 09:38	12/13/16 21:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Arsenic	2.9		0.62	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Barium	72		0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Beryllium	0.50		0.25	0.053	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Boron	1.8	J	3.1	0.43	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Cadmium	0.21		0.12	0.036	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Calcium	3600		12	4.0	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Chromium	13	B	0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Cobalt	7.0		0.31	0.070	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Copper	10		0.62	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Iron	13000		12	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Lead	10		0.31	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Magnesium	2700		6.2	2.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Manganese	280		0.62	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Nickel	15		0.62	0.17	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Potassium	770		31	5.0	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Selenium	<0.62		0.62	0.31	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Silver	<0.31		0.31	0.072	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Sodium	130		62	8.1	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Thallium	<0.62		0.62	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Vanadium	16		0.31	0.090	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
Zinc	43		1.2	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.38	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:07	1
Boron	0.060	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:07	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B05 (6-12)

Lab Sample ID: 500-121005-6

Date Collected: 12/05/16 13:40

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 78.0

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		12/08/16 14:21	12/10/16 18:07	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:07	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:07	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:07	1
Manganese	0.042		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:07	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:07	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:07	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:07	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 16:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 16:56	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 09:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.020	0.010	mg/Kg	✱	12/07/16 14:45	12/08/16 11:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/09/16 19:17	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B04 (0-5)

Lab Sample ID: 500-121005-7

Date Collected: 12/05/16 13:55

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/06/16 13:50	12/07/16 16:59	1
Dibromofluoromethane	100		75 - 120	12/06/16 13:50	12/07/16 16:59	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/06/16 13:50	12/07/16 16:59	1
Toluene-d8 (Surr)	103		75 - 123	12/06/16 13:50	12/07/16 16:59	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	☼	12/12/16 09:38	12/14/16 03:32	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B04 (0-5)

Lab Sample ID: 500-121005-7

Date Collected: 12/05/16 13:55

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.1

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	☼	12/12/16 09:38	12/14/16 03:32	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Phenanthrene	0.052		0.039	0.0055	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Anthracene	0.0084	J	0.039	0.0065	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Fluoranthene	0.079		0.039	0.0073	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Pyrene	0.092		0.039	0.0078	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Benzo[a]anthracene	0.036	J	0.039	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B04 (0-5)

Lab Sample ID: 500-121005-7

Date Collected: 12/05/16 13:55

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.045		0.039	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Benzo[b]fluoranthene	0.054		0.039	0.0085	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Benzo[k]fluoranthene	0.040		0.039	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Benzo[a]pyrene	0.043		0.039	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Indeno[1,2,3-cd]pyrene	0.028	J	0.039	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Dibenz(a,h)anthracene	0.0090	J	0.039	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
Benzo[g,h,i]perylene	0.051		0.039	0.013	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		40 - 130	12/12/16 09:38	12/14/16 03:32	1
Phenol-d5	88		36 - 123	12/12/16 09:38	12/14/16 03:32	1
Nitrobenzene-d5	76		33 - 124	12/12/16 09:38	12/14/16 03:32	1
2-Fluorobiphenyl	81		42 - 115	12/12/16 09:38	12/14/16 03:32	1
2,4,6-Tribromophenol	99		25 - 130	12/12/16 09:38	12/14/16 03:32	1
Terphenyl-d14	128		25 - 150	12/12/16 09:38	12/14/16 03:32	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	☼	12/08/16 15:09	12/09/16 14:07	1
Arsenic	3.1		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Barium	75		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Beryllium	0.44		0.23	0.050	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Boron	1.8	J	2.9	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Cadmium	0.26		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Calcium	18000		11	3.7	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Chromium	12	B	0.57	0.098	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Cobalt	6.1		0.29	0.065	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Copper	9.1		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Iron	11000		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Lead	26		0.29	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Magnesium	7000		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Manganese	380		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Nickel	14		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Potassium	550		29	4.7	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Selenium	0.47	J	0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Sodium	290		57	7.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Vanadium	16		0.29	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
Zinc	45		1.1	0.36	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	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 18:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:14	1
Boron	0.068	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:14	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B04 (0-5)

Lab Sample ID: 500-121005-7

Date Collected: 12/05/16 13:55

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.1

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		12/08/16 14:21	12/10/16 18:14	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:14	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:14	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:14	1
Manganese	1.8		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:14	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:14	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:14	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:14	1
Zinc	0.049	J	0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:14	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.49		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 03:15	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		12/08/16 14:21	12/09/16 16:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 16:59	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 09:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.020	0.011	mg/Kg	☼	12/07/16 14:45	12/08/16 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			12/09/16 19:21	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (0-4)

Lab Sample ID: 500-121005-8

Date Collected: 12/05/16 14:10

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0089	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Bromodichloromethane	<0.0020		0.0020	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Bromoform	<0.0020		0.0020	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Chlorobenzene	<0.0020		0.0020	0.00076	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Chloroform	<0.0020		0.0020	0.00071	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Dibromochloromethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,2-Dichloropropane	<0.0020		0.0020	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Ethylbenzene	<0.0020		0.0020	0.00098	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Styrene	<0.0020		0.0020	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Tetrachloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Toluene	<0.0020		0.0020	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00091	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00088	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Vinyl chloride	<0.0020		0.0020	0.00091	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/06/16 13:50	12/07/16 17:24	1
Dibromofluoromethane	98		75 - 120	12/06/16 13:50	12/07/16 17:24	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/06/16 13:50	12/07/16 17:24	1
Toluene-d8 (Surr)	105		75 - 123	12/06/16 13:50	12/07/16 17:24	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	☼	12/12/16 09:38	12/13/16 22:12	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (0-4)

Lab Sample ID: 500-121005-8

Date Collected: 12/05/16 14:10

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.2

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	☼	12/12/16 09:38	12/13/16 22:12	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (0-4)

Lab Sample ID: 500-121005-8

Date Collected: 12/05/16 14:10

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.2

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	☼	12/12/16 09:38	12/13/16 22:12	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	93		40 - 130	12/12/16 09:38	12/13/16 22:12	1
Phenol-d5	83		36 - 123	12/12/16 09:38	12/13/16 22:12	1
Nitrobenzene-d5	79		33 - 124	12/12/16 09:38	12/13/16 22:12	1
2-Fluorobiphenyl	79		42 - 115	12/12/16 09:38	12/13/16 22:12	1
2,4,6-Tribromophenol	47		25 - 130	12/12/16 09:38	12/13/16 22:12	1
Terphenyl-d14	97		25 - 150	12/12/16 09:38	12/13/16 22:12	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	☼	12/08/16 15:09	12/09/16 14:12	1
Arsenic	2.5		0.59	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Barium	76		0.59	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Beryllium	0.45		0.24	0.051	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Boron	2.2 J		2.9	0.41	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Cadmium	0.32		0.12	0.034	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Calcium	3700		12	3.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Chromium	10 B		0.59	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Cobalt	5.4		0.29	0.066	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Copper	10		0.59	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Iron	10000		12	4.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Lead	15		0.29	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Magnesium	1500		5.9	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Manganese	260		0.59	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Nickel	14		0.59	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Potassium	670		29	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Selenium	0.59		0.59	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Silver	<0.29		0.29	0.069	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Sodium	43 J		59	7.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Vanadium	14		0.29	0.086	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
Zinc	110		1.2	0.37	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.27 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:21	1
Boron	0.073 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:21	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (0-4)

Lab Sample ID: 500-121005-8

Date Collected: 12/05/16 14:10

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.2

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		12/08/16 14:21	12/10/16 18:21	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:21	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:21	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:21	1
Manganese	0.013	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:21	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:21	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:21	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:21	1
Zinc	0.092	J	0.50	0.020	mg/L		12/08/16 14:21	12/10/16 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		12/08/16 14:21	12/09/16 17:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:02	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/08/16 12:45	12/09/16 09:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.019	0.0098	mg/Kg	☼	12/07/16 14:45	12/08/16 12:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			12/09/16 19:24	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (4-9)

Lab Sample ID: 500-121005-9

Date Collected: 12/05/16 14:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.7

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	☼	12/06/16 13:50	12/07/16 17:48	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/06/16 13:50	12/07/16 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/06/16 13:50	12/07/16 17:48	1
Dibromofluoromethane	100		75 - 120	12/06/16 13:50	12/07/16 17:48	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/06/16 13:50	12/07/16 17:48	1
Toluene-d8 (Surr)	101		75 - 123	12/06/16 13:50	12/07/16 17:48	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	☼	12/12/16 09:38	12/13/16 22:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (4-9)

Lab Sample ID: 500-121005-9

Date Collected: 12/05/16 14:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.7

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	☼	12/12/16 09:38	12/13/16 22:41	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,4-Dinitrophenol	<0.80		0.80	0.69	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (4-9)

Lab Sample ID: 500-121005-9

Date Collected: 12/05/16 14:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.7

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	☼	12/12/16 09:38	12/13/16 22:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 22:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		40 - 130	12/12/16 09:38	12/13/16 22:41	1
Phenol-d5	71		36 - 123	12/12/16 09:38	12/13/16 22:41	1
Nitrobenzene-d5	66		33 - 124	12/12/16 09:38	12/13/16 22:41	1
2-Fluorobiphenyl	66		42 - 115	12/12/16 09:38	12/13/16 22:41	1
2,4,6-Tribromophenol	23	X	25 - 130	12/12/16 09:38	12/13/16 22:41	1
Terphenyl-d14	84		25 - 150	12/12/16 09:38	12/13/16 22:41	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	☼	12/08/16 15:09	12/09/16 14:16	1
Arsenic	3.1		0.59	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Barium	62		0.59	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Beryllium	0.41		0.24	0.051	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Boron	1.6	J	2.9	0.41	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Cadmium	0.16		0.12	0.034	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Calcium	2600		12	3.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Chromium	10	B	0.59	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Cobalt	5.5		0.29	0.067	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Copper	9.4		0.59	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Iron	11000		12	4.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Lead	8.6		0.29	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Magnesium	1700		5.9	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Manganese	160		0.59	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Nickel	11		0.59	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Potassium	650		29	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Selenium	<0.59		0.59	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Silver	<0.29		0.29	0.069	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Sodium	42	J	59	7.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Vanadium	13		0.29	0.086	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
Zinc	37		1.2	0.37	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.22	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:28	1
Boron	<0.50		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:28	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B03 (4-9)

Lab Sample ID: 500-121005-9

Date Collected: 12/05/16 14:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 80.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 18:28	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:28	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:28	1
Iron	0.32	J	0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:28	1
Manganese	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:28	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:28	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:28	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:28	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:28	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 17:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:13	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 09:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.019	0.0097	mg/Kg	☼	12/07/16 14:45	12/08/16 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			12/09/16 19:28	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B02 (0-7)

Lab Sample ID: 500-121005-10

Date Collected: 12/05/16 14:30

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0088	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
2-Butanone (MEK)	<0.0051		0.0051	0.0022	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Chloromethane	<0.0051		0.0051	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Ethylbenzene	<0.0020		0.0020	0.00097	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 120	12/06/16 13:50	12/07/16 18:13	1
Dibromofluoromethane	100		75 - 120	12/06/16 13:50	12/07/16 18:13	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/06/16 13:50	12/07/16 18:13	1
Toluene-d8 (Surr)	102		75 - 123	12/06/16 13:50	12/07/16 18:13	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	☼	12/12/16 09:38	12/14/16 02:05	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B02 (0-7)

Lab Sample ID: 500-121005-10

Date Collected: 12/05/16 14:30

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.6

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	☼	12/12/16 09:38	12/14/16 02:05	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Phenanthrene	0.085		0.041	0.0057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Anthracene	0.011 J		0.041	0.0068	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Fluoranthene	0.30		0.041	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Pyrene	0.24		0.041	0.0081	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Benzo[a]anthracene	0.11		0.041	0.0055	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B02 (0-7)

Lab Sample ID: 500-121005-10

Date Collected: 12/05/16 14:30

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.17		0.041	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Benzo[b]fluoranthene	0.23		0.041	0.0088	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Benzo[k]fluoranthene	0.081		0.041	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Benzo[a]pyrene	0.13		0.041	0.0079	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Indeno[1,2,3-cd]pyrene	0.091		0.041	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Dibenz(a,h)anthracene	0.027	J	0.041	0.0079	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
Benzo[g,h,i]perylene	0.10		0.041	0.013	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/12/16 09:38	12/14/16 02:05	1
Phenol-d5	82		36 - 123	12/12/16 09:38	12/14/16 02:05	1
Nitrobenzene-d5	72		33 - 124	12/12/16 09:38	12/14/16 02:05	1
2-Fluorobiphenyl	72		42 - 115	12/12/16 09:38	12/14/16 02:05	1
2,4,6-Tribromophenol	59		25 - 130	12/12/16 09:38	12/14/16 02:05	1
Terphenyl-d14	88		25 - 150	12/12/16 09:38	12/14/16 02:05	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.2	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Arsenic	3.6		0.62	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Barium	82		0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Beryllium	0.48		0.25	0.054	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Boron	2.5	J	3.1	0.43	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Cadmium	0.44		0.12	0.036	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Calcium	54000		120	40	mg/Kg	☼	12/08/16 15:09	12/09/16 23:22	10
Chromium	11	B	0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Cobalt	8.5		0.31	0.070	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Copper	11		0.62	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Iron	11000		12	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Lead	72		0.31	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Magnesium	1800		6.2	2.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Manganese	530		0.62	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Nickel	17		0.62	0.17	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Potassium	830		31	5.0	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Selenium	0.50	J	0.62	0.31	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Silver	<0.31		0.31	0.072	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Sodium	63		62	8.2	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Thallium	<0.62		0.62	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Vanadium	14		0.31	0.090	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
Zinc	75		1.2	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.34	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:35	1
Boron	0.068	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:35	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

Client Sample ID: 1314V3-60-B02 (0-7)

Lab Sample ID: 500-121005-10

Date Collected: 12/05/16 14:30

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.6

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 18:35	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:35	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:35	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:35	1
Lead	0.021		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:35	1
Manganese	0.13		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:35	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:35	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:35	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:35	1
Zinc	0.082	J	0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:35	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.11		0.0075	0.0075	mg/L		12/08/16 14:20	12/11/16 03:36	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		12/08/16 14:21	12/09/16 17:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:16	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		12/08/16 12:45	12/09/16 09:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.076		0.020	0.011	mg/Kg	☼	12/07/16 14:45	12/08/16 11:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/09/16 19:31	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 500-121005-1

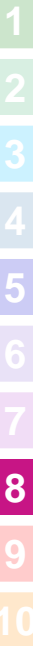
Laboratory: TestAmerica Chicago

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 604
Phone: 708.534.5200 Fax: 708.534.



500-121005 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 #: 500-121005
Chain of Custody Number: EG46-18
Page _____ of _____
Temperature °C of Cooler: 4/1/12

Client: <u>BEF</u>		Client Project # <u>1009008-0096-01</u>		Preservative							Comments		
Project Name <u>I74</u>		Lab Project # <u>50012744</u>		Parameter							Preservative Key		
Project Location/State <u>Rock Island County, IL</u>		Lab PM <u>D. Wright</u>									1. HCL, Cool to 4°		
Sample <u>S. Cooper</u>											2. H2SO4, Cool to 4°		
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Voc	Svcs	Zn	Pb	Cu	Cd	Mn
			Date	Time									
1		1314V3-60-B01 (0-6)	12-5-16	12:40	2	S	X	X	X	X	X		
2		1314V3-60-B01 (6-11)	12-5-16	12:45	2	S	X	X	X	X	X		
3		1314V3-60-B06 (0-6)	12-5-16	13:05	2	S	X	X	X	X	X		
4		1314V3-60-B06 (6-12)	12-5-16	13:10	2	S	X	X	X	X	X		
5		1314V3-60-B05 (0-6)	12-5-16	13:35	2	S	X	X	X	X	X		
6		1314V3-60-B05 (6-12)	12-5-16	13:40	2	S	X	X	X	X	X		
7		1314V3-60-B04 (0-5)	12-5-16	13:55	2	S	X	X	X	X	X		
8		1314V3-60-B03 (0-4)	12-5-16	14:10	2	S	X	X	X	X	X		
9		1314V3-60-B03 (4-9)	12-5-16	14:15	2	S	X	X	X	X	X		
10		1314V3-60-B02 (0-7)	12-5-16	14:30	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: <u>WV</u>	Date: <u>12-5-16</u>	Time: <u>17:15</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CAT</u>	Date: <u>12/6/16</u>	Time: <u>10:30</u>	Lab Courier: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____	Shipped: <u>FedEx</u>
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: 500-121005-1

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	



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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-121005-2
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

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results through
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www.testamericainc.com

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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.

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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

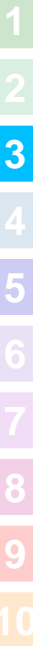
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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-B11 (0-8)

Lab Sample ID: 500-121005-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	68		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	3400		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.57	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	9.0		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1900		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	610		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	540		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	41		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.22	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.029		0.018	0.0092	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 1314V3-01-B11 (8-15)

Lab Sample ID: 500-121005-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.7		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		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	0.20		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	13000		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	8.4		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	7.5		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8500		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	550		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	840		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	38		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.73		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	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: 500-121005-2

Client Sample ID: 1314V3-01-B11 (8-15) (Continued)

Lab Sample ID: 500-121005-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.71		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.018	0.0095	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
500-121005-11	1314V3-01-B11 (0-8)	Solid	12/05/16 15:05	12/06/16 10:30
500-121005-12	1314V3-01-B11 (8-15)	Solid	12/05/16 15:15	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0092	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
2-Butanone (MEK)	<0.0053		0.0053	0.0023	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chlorobenzene	<0.0021		0.0021	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,2-Dichloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
2-Hexanone	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Tetrachloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Vinyl acetate	<0.0053		0.0053	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/06/16 13:50	12/07/16 18:38	1
Dibromofluoromethane	100		75 - 120	12/06/16 13:50	12/07/16 18:38	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/06/16 13:50	12/07/16 18:38	1
Toluene-d8 (Surr)	101		75 - 123	12/06/16 13:50	12/07/16 18:38	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

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	☼	12/12/16 09:38	12/13/16 23:10	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		40 - 130	12/12/16 09:38	12/13/16 23:10	1
Phenol-d5	79		36 - 123	12/12/16 09:38	12/13/16 23:10	1
Nitrobenzene-d5	70		33 - 124	12/12/16 09:38	12/13/16 23:10	1
2-Fluorobiphenyl	72		42 - 115	12/12/16 09:38	12/13/16 23:10	1
2,4,6-Tribromophenol	32		25 - 130	12/12/16 09:38	12/13/16 23:10	1
Terphenyl-d14	87		25 - 150	12/12/16 09:38	12/13/16 23:10	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	☼	12/08/16 15:09	12/09/16 14:25	1
Arsenic	3.1		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Barium	68		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Beryllium	0.42		0.23	0.049	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Boron	2.3 J		2.8	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Cadmium	0.23		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Calcium	3400		11	3.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Chromium	11 B		0.57	0.097	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Cobalt	5.2		0.28	0.064	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Copper	9.0		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Iron	10000		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Lead	13		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Magnesium	1900		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Manganese	220		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Nickel	12		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Potassium	610		28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Selenium	0.34 J		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Sodium	540		57	7.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Vanadium	14		0.28	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
Zinc	41		1.1	0.36	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.22 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:41	1
Boron	0.082 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:41	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-B11 (0-8)

Lab Sample ID: 500-121005-11

Date Collected: 12/05/16 15:05

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 83.0

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		12/08/16 14:21	12/10/16 18:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:41	1
Manganese	0.014	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:41	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:41	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:41	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 17:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:20	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		12/08/16 12:45	12/09/16 09:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.018	0.0092	mg/Kg	☼	12/07/16 14:45	12/08/16 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/09/16 19:35	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-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/06/16 13:50	12/07/16 19:02	1
Dibromofluoromethane	100		75 - 120	12/06/16 13:50	12/07/16 19:02	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/06/16 13:50	12/07/16 19:02	1
Toluene-d8 (Surr)	103		75 - 123	12/06/16 13:50	12/07/16 19:02	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	☼	12/12/16 09:38	12/13/16 23:39	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-2

Client Sample ID: 1314V3-01-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

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	☼	12/12/16 09:38	12/13/16 23:39	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	89		40 - 130	12/12/16 09:38	12/13/16 23:39	1
Phenol-d5	82		36 - 123	12/12/16 09:38	12/13/16 23:39	1
Nitrobenzene-d5	76		33 - 124	12/12/16 09:38	12/13/16 23:39	1
2-Fluorobiphenyl	76		42 - 115	12/12/16 09:38	12/13/16 23:39	1
2,4,6-Tribromophenol	39		25 - 130	12/12/16 09:38	12/13/16 23:39	1
Terphenyl-d14	94		25 - 150	12/12/16 09:38	12/13/16 23:39	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	☼	12/08/16 15:09	12/09/16 14:30	1
Arsenic	3.7		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Barium	58		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Beryllium	0.38		0.23	0.049	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Boron	2.1 J		2.8	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Cadmium	0.20		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Calcium	13000		11	3.7	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Chromium	11 B		0.57	0.098	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Cobalt	5.2		0.28	0.064	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Copper	8.4		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Iron	11000		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Lead	7.5		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Magnesium	8500		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Manganese	210		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Nickel	13		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Potassium	550		28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Silver	<0.28		0.28	0.067	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Sodium	840		57	7.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Vanadium	18		0.28	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
Zinc	38		1.1	0.36	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	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		12/08/16 14:21	12/10/16 18:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:48	1
Boron	0.063 J		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:48	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-B11 (8-15)

Lab Sample ID: 500-121005-12

Date Collected: 12/05/16 15:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 81.5

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		12/08/16 14:21	12/10/16 18:48	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 18:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:48	1
Manganese	0.73		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Nickel	0.011	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 18:48	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 18:48	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.71		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 04:05	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		12/08/16 14:21	12/09/16 17:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:23	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 10:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018	0.0095	mg/Kg	☼	12/07/16 14:45	12/08/16 11:34	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 19:38	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

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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		Parameter												Preservative Key			
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			
Project Name		Project Location/State		Lab Project #																	
ITM		Rab Island Cnty, IL		SC012744																	
Sampler		Lab PM																			
S. Cooper		D. Wright																			
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers	Matrix	Voc	Sicc	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	TEMP THE	
		Date	Time	Date	Time																
11		1314V3-01-B11 (0-8)		12/5/16	1505	2	S	X	X	X	X	X	X	X	X	X	X	X	X	X	64C08
12		1314V3-01-B11 (8-15)		12/5/16	1515	2	S	X	X	X	X	X	X	X	X	X	X	X	X	X	

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Requested Due Date _____

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<i>[Signature]</i>	EE	12/5/16		<i>[Signature]</i>	TA-CERT	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: FedEx
 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:

TestAmerica

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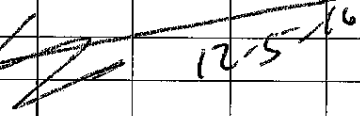
2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

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

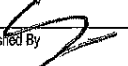
Lab Job #: 500-121005
 Chain of Custody Number: EN6-20
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
EE		009098 0046-01									
Project Name		Lab Project #		Sampling		Date		Time		# of Containers	
IT4		50012744									
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix	
Rock Island County, IL		D. W. ...									
Sampler		Lab PM		Date		Time		# of Containers		Matrix	
S. Camp		D. W. ...									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Vol	SVol	Top of the ...	End of the ...	Part of the ...
13		1314V3-01-B334(0-7)	12-5-16	1615	2	S	x	x	x	x	x
14		1314V3-01-B334(7-14)	12-5-16	1620	2	S	x	x	x	x	x
15		1314V3-01-B334(14-20)	12-5-16	1624	2	S	x	x	x	x	x
											

- Preservative Key
1. HCl, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 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	



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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-121163-1
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:
12/22/2016 2:52:34 PM

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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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121163-1

Job ID: 500-121163-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-121163-1

Comments

No additional comments.

Receipt

The samples were received on 12/8/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 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

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 365567 had 1 analyte outside control limits: 4-Nitroaniline. These results have been reported and qualified. (LCS 500-365567/2-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 500-364421 and 500-364618 contained Lead above the reporting limit (RL). The samples 1314V3-01-B10 (0-6) (500-121163-1), 1314V3-06-B10 (0-6) (500-121163-2), 1314V3-06-B10 (6-11) (500-121163-3), 1314V3-06-B11 (0-6) (500-121163-4), 1314V3-06-B11 (6-10.7) (500-121163-5), 1314V3-07-B01 (0-6) (500-121163-8), 1314V3-07-B02 (0-5) (500-121163-10), 1314V3-07-B04 (0-5) (500-121163-12) and 1314V3-07-B04 (5-11) (500-121163-13) associated with this LB did not contain the target compound; therefore, re-extraction and/or re-analysis of the samples were not performed.

Method(s) 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-364837, at line 160, recovered above the upper control limit for Thallium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 6020A: The CCB at lines 155 and 159 had results greater than the reporting limit(RL) of 2 ppb for TI. The samples associated with these CCB were had results below the RL and therefore were 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: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.026	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.063		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.068		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.043		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.046		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.073		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.026	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.057		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.035	J	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.010	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.044		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.0		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	54		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.9		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	24		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	560		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	350		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.80		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.41		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.40		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038		0.017	0.0091	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: 500-121163-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121163-1	1314V3-01-B10 (0-6)	Solid	12/07/16 08:40	12/08/16 09:00

1

2

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.025		0.025	0.011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Benzene	<0.0025		0.0025	0.00063	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Bromodichloromethane	<0.0025		0.0025	0.00050	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Bromoform	<0.0025		0.0025	0.00072	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Bromomethane	<0.0061		0.0061	0.0023	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
2-Butanone (MEK)	<0.0061		0.0061	0.0027	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Carbon disulfide	<0.0061		0.0061	0.0013	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Carbon tetrachloride	<0.0025		0.0025	0.00071	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chlorobenzene	<0.0025		0.0025	0.00091	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chloroethane	<0.0061		0.0061	0.0018	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chloroform	<0.0025		0.0025	0.00085	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Chloromethane	<0.0061		0.0061	0.0025	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00069	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00074	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Dibromochloromethane	<0.0025		0.0025	0.00080	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1-Dichloroethane	<0.0025		0.0025	0.00084	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,2-Dichloroethane	<0.0061		0.0061	0.0019	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1-Dichloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,2-Dichloropropane	<0.0025		0.0025	0.00063	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,3-Dichloropropene, Total	<0.0025		0.0025	0.00086	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
2-Hexanone	<0.0061		0.0061	0.0019	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Methylene Chloride	<0.0061		0.0061	0.0024	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
4-Methyl-2-pentanone (MIBK)	<0.0061		0.0061	0.0018	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00072	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Styrene	<0.0025		0.0025	0.00074	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00078	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Tetrachloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Toluene	<0.0025		0.0025	0.00062	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00086	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1,1-Trichloroethane	<0.0025		0.0025	0.00082	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Trichloroethene	<0.0025		0.0025	0.00083	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Vinyl acetate	<0.0061		0.0061	0.0021	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1
Xylenes, Total	<0.0049		0.0049	0.00079	mg/Kg	☼	12/08/16 13:05	12/09/16 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/08/16 13:05	12/09/16 15:11	1
Dibromofluoromethane	107		75 - 120	12/08/16 13:05	12/09/16 15:11	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/08/16 13:05	12/09/16 15:11	1
Toluene-d8 (Surr)	104		75 - 123	12/08/16 13:05	12/09/16 15:11	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	☼	12/16/16 18:31	12/20/16 13:21	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

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	0.044	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Nitroaniline	<0.36 *		0.36	0.15	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Phenanthrene	0.026 J		0.036	0.0051	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Fluoranthene	0.063		0.036	0.0068	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Pyrene	0.068		0.036	0.0073	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[a]anthracene	0.043		0.036	0.0049	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.046		0.036	0.010	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[b]fluoranthene	0.073		0.036	0.0079	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[k]fluoranthene	0.026	J	0.036	0.011	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[a]pyrene	0.057		0.036	0.0071	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Indeno[1,2,3-cd]pyrene	0.035	J	0.036	0.0095	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Dibenz(a,h)anthracene	0.010	J	0.036	0.0071	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
Benzo[g,h,i]perylene	0.044		0.036	0.012	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/16/16 18:31	12/20/16 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/16/16 18:31	12/20/16 13:21	1
Phenol-d5	99		36 - 123	12/16/16 18:31	12/20/16 13:21	1
Nitrobenzene-d5	96		33 - 124	12/16/16 18:31	12/20/16 13:21	1
2-Fluorobiphenyl	93		42 - 115	12/16/16 18:31	12/20/16 13:21	1
2,4,6-Tribromophenol	90		25 - 130	12/16/16 18:31	12/20/16 13:21	1
Terphenyl-d14	109		25 - 150	12/16/16 18:31	12/20/16 13:21	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	☼	12/10/16 10:04	12/10/16 18:51	1
Arsenic	4.0		0.57	0.26	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Barium	54		0.57	0.10	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Beryllium	0.54		0.23	0.049	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Boron	1.7	J	2.9	0.40	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Cadmium	0.24		0.11	0.033	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Calcium	23000		11	3.7	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Chromium	12	B	0.57	0.098	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Cobalt	6.9		0.29	0.065	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Copper	12		0.57	0.12	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Iron	12000		11	4.4	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Lead	24		0.29	0.14	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Magnesium	13000		5.7	2.3	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Manganese	280		0.57	0.11	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Nickel	24		0.57	0.15	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Potassium	560		29	4.7	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Sodium	350		57	7.5	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Vanadium	18		0.29	0.083	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1
Zinc	52		1.1	0.36	mg/Kg	☼	12/10/16 10:04	12/10/16 18:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80		0.50	0.050	mg/L		12/12/16 09:08	12/13/16 17:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/12/16 09:08	12/13/16 17:36	1
Boron	0.055	J	0.50	0.050	mg/L		12/12/16 09:08	12/13/16 17:36	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121163-1

Client Sample ID: 1314V3-01-B10 (0-6)

Lab Sample ID: 500-121163-1

Date Collected: 12/07/16 08:40

Matrix: Solid

Date Received: 12/08/16 09:00

Percent Solids: 86.5

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		12/12/16 09:08	12/13/16 17:36	1
Chromium	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Cobalt	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Iron	<0.40		0.40	0.20	mg/L		12/12/16 09:08	12/13/16 17:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/12/16 09:08	12/13/16 17:36	1
Manganese	0.41		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Nickel	0.026		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Selenium	<0.050		0.050	0.020	mg/L		12/12/16 09:08	12/13/16 17:36	1
Silver	<0.025		0.025	0.010	mg/L		12/12/16 09:08	12/13/16 17:36	1
Zinc	<0.50		0.50	0.020	mg/L		12/12/16 09:08	12/13/16 17:36	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.40		0.025	0.010	mg/L		12/12/16 09:04	12/15/16 14:03	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		12/12/16 09:08	12/12/16 21:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/12/16 09:08	12/12/16 21:21	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		12/12/16 12:00	12/13/16 10:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.017	0.0091	mg/Kg	☼	12/09/16 15:45	12/12/16 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			12/12/16 13:05	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121163-1

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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 500-121163-1

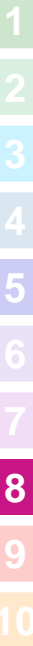
Laboratory: TestAmerica Chicago

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 604
Phone: 708.534.5200 Fax: 708.534.



500-121163 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 #: 500-121163
Chain of Custody Number: E84685
Page _____ of _____
Temperature °C of Cooler: 4.1

Client		Client Project #		Preservative							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		Parameter							Comments			
Project Location/State		Lab Project #										
Sampler		Lab RM										
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers	Matrix					
		Date	Time									
1		131403-01-1310(0-6)	12-7-16 0840	2	S	X	X	X	X	X		64C08
12-7-16												

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>EE</u>	Date: <u>12/7/16</u>	Time: <u>12:00</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CPE</u>	Date: <u>12/8/16</u>	Time: <u>0900</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 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: 500-121163-1

Login Number: 121163

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
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	

