

**FINAL  
Preliminary Site  
Investigation Report  
FAI 74 (Interstate 74)  
Moline, Rock Island County,  
Illinois**

**Contract No.: PTB 172-027  
Work Order No. 46  
IDOT Job No.: P-93-032-01  
BDE Sequence No.: 9724A  
Section No.: 81B  
Route: FAI 74  
ISGS Report No.: 1314V3  
Bid Letting Date: June 16, 2017  
Contract No.: 64E26**

**March 15, 2017**

**Prepared for:**



**ILLINOIS DEPARTMENT OF TRANSPORTATION  
Bureau of Design and Environment  
2300 South Dirksen Parkway  
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**Prepared by:**



**ecology and environment, inc.**

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## List of Acronyms

bgs	below ground surface
CCDD	clean construction or demolition debris
COC	contaminant of concern
E & E	Ecology and Environment, Inc.
GPS	global positioning system
I-74	Interstate 74
IAC	Illinois Administrative Code
IDOT	Illinois Department of Transportation
ISGS	Illinois State Geological Survey
MACs	Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations
MSA	metropolitan statistical area
MU	meter unit
NELAP	National Environmental Laboratory Accreditation Program
NRCS	Natural Resources Conservation Service
OSHA	Occupational Safety and Health Administration
PESA	Preliminary Environmental Site Assessment
PID	photoionization detector
PSI	preliminary site investigation
QC	quality control
RECs	recognized environmental conditions
ROs	remediation objectives
ROW	right-of-way
SCGIER	soil component of the groundwater ingestion exposure route

## List of Acronyms (Cont.)

SOPs	standard operating procedures
SPLP	synthetic precipitation leaching procedure
SU	standard unit
SVOCs	semi-volatile organic compounds
TACO	Tiered Approach to Corrective Action Objectives
TCLP	toxicity characteristic leaching procedure
USFO	uncontaminated soil fill operation
VOCs	volatile organic compounds

# 1

## Introduction

This preliminary site investigation (PSI) report was prepared for the Illinois Department of Transportation (IDOT) pursuant to Work Order 046 issued to Ecology and Environment, Inc., (E & E) under the IDOT Work Order Agreement for Consultant Services, PTB No. 172-027— Various Statewide Waste Assessments, Studies and Designs. E & E was tasked by IDOT to conduct the PSI for proposed construction adjacent to IDOT right-of-way (ROW) along Interstate 74 (I-74) in Moline, Rock Island County, Illinois.

This report addresses proposed construction activities under contract number 64E26, extending south from 7<sup>th</sup> Avenue. Construction activities north of 7<sup>th</sup> Avenue will be conducted under contract number 64C08 and are addressed in a separate report.

Field investigation activities were conducted by E & E in November and December 2016. The objectives of the investigation as defined in the IDOT-approved work plan dated November 11, 2016 (E & E 2016) are as follows:

- Determine the magnitude and the lateral and vertical extent of potential soil contamination within existing and proposed IDOT ROW in the proposed construction area. The impact of possible contamination on the uppermost groundwater unit will also be evaluated if groundwater is encountered within the proposed construction zone during the investigation.
- Prepare a site investigation report with findings, conclusions, and recommendations as well as a remediation scope of work, based upon the results of chemical analysis of soil and groundwater samples. The remediation scope of work will include an estimate of contaminated soil excavation quantities and an associated estimated cost for remediation. If groundwater has been affected and sufficient data on the extent and source of contamination is available, remedial alternatives will be provided to implement cleanup.
- Assess the potential for surrounding IDOT property within the project area to be affected by contaminants migrating from affected areas and present recommendations to mitigate contaminant migration when the potential for migration is determined to be high.



This report presents the findings of E & E's investigation and consists of six sections. Section 2 provides pertinent site background information. Section 3 describes the procedures and sampling rationale used during the field investigation. Section 4 summarizes E & E's field investigation results, including observations, field measurements, sampling rationale, analytical results, and comparisons of the analytical results with regulatory standards. Section 5 provides conclusions of the investigation and recommendations for further investigation and contaminant migration reduction techniques, if necessary. Section 6 lists the references cited in this report.

# 2

## Site Background

IDOT construction plans provided to E & E indicate that soil excavation is anticipated for this project for reconstruction of I-74, including ramps and nearby streets; and storm sewer reconstruction. Excavations associated with the improvements are estimated to extend to a maximum depth of 22.8 feet below ground surface (bgs). A summary of the proposed construction activities is presented by site in Table 1-1. Project construction plans provided to E & E indicate that property acquisition is not proposed for this contract.

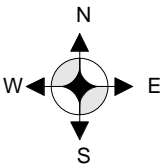
The Illinois State Geological Survey (ISGS) conducted a Preliminary Environmental Site Assessment (PESA) of the project area to identify sites with recognized environmental conditions (RECs) that may potentially affect the project. Table 2-1 presents the sites identified by ISGS, along with the identified RECs and the proposed IDOT construction activities at each site. Applicable background information about the sites, taken directly from ISGS PESA report number 1314V3, is included as Appendix A. The site investigation area is shown in Figure 2-1.

**Table 2-1 Summary of Sites and Proposed Construction Activities  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

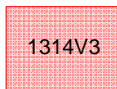
Site	Recognized Environmental Conditions (RECs)	Planned Construction Activities	Planned Property Acquisition
ISGS #1314V3-1 (ROW)	Spills; former ASTs; evidence of chemical use.  <i>De minimis</i> conditions include natural gas pipeline; potential ACM.	Reconstruction of I-74 and storm sewer. Maximum proposed excavation depth is 22.8 feet bgs.	None
ISGS #1314V3-66 (Scottish Rite Masonic Center)	Potential USTs; potential chemical use; VOCs previously detected.  <i>De minimis</i> conditions include transformer; potential ACM and lead paint.	Reconstruction of 7 <sup>th</sup> Avenue, Ramp B, and storm sewer. Maximum proposed excavation depth is 6.3 feet bgs.	None
ISGS #1314V3-67 (Vacant Land)	Potential USTs; potential former chemical use; VOCs previously detected.  No <i>de minimis</i> conditions were identified.	Reconstruction of 7 <sup>th</sup> Avenue, 19 <sup>th</sup> Street, I-74, and storm sewer. Maximum proposed excavation depth is 10.5 feet bgs.	None
ISGS #1314V3-74 (Residence)	Former drum; evidence of chemical use.  <i>De minimis</i> conditions include potential ACM and lead paint.	Reconstruction of 19 <sup>th</sup> Street, 11 <sup>th</sup> Avenue, and storm sewer. Maximum proposed excavation depth is 1.4 feet bgs.	None
ISGS #1314V3-75 (Residence)	Evidence of chemical use.  <i>De minimis</i> conditions include potential ACM and lead paint.	Reconstruction of 19 <sup>th</sup> Street, 11 <sup>th</sup> Avenue, and storm sewer. Maximum proposed excavation depth is 1.4 feet bgs.	None

Key:

- ACM = Asbestos-containing material.
- bgs = Below ground surface.
- ISGS = Illinois State Geological Survey.
- UST = Underground Storage Tank.
- VOC = Volatile Organic Compound.



**LEGEND**



1314V3 - ISGS PESA ROUTE



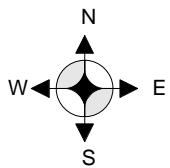
**ecology and environment, inc.**  
Global Environmental Specialists

**SITE AREA—CONTRACT 64E26 NORTH**

ROUTE: FAI 74 (I-74)  
CITY: Moline  
COUNTY: Rock Island



FIGURE NO:  
2-1



**LEGEND**

 - ISGS PESA ROUTE



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**SITE AREA – CONTRACT 64E26 CENTER**

ROUTE: FAI 74 (I-74)  
CITY: Moline  
COUNTY: Rock Island


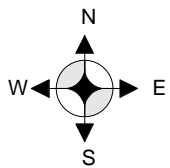
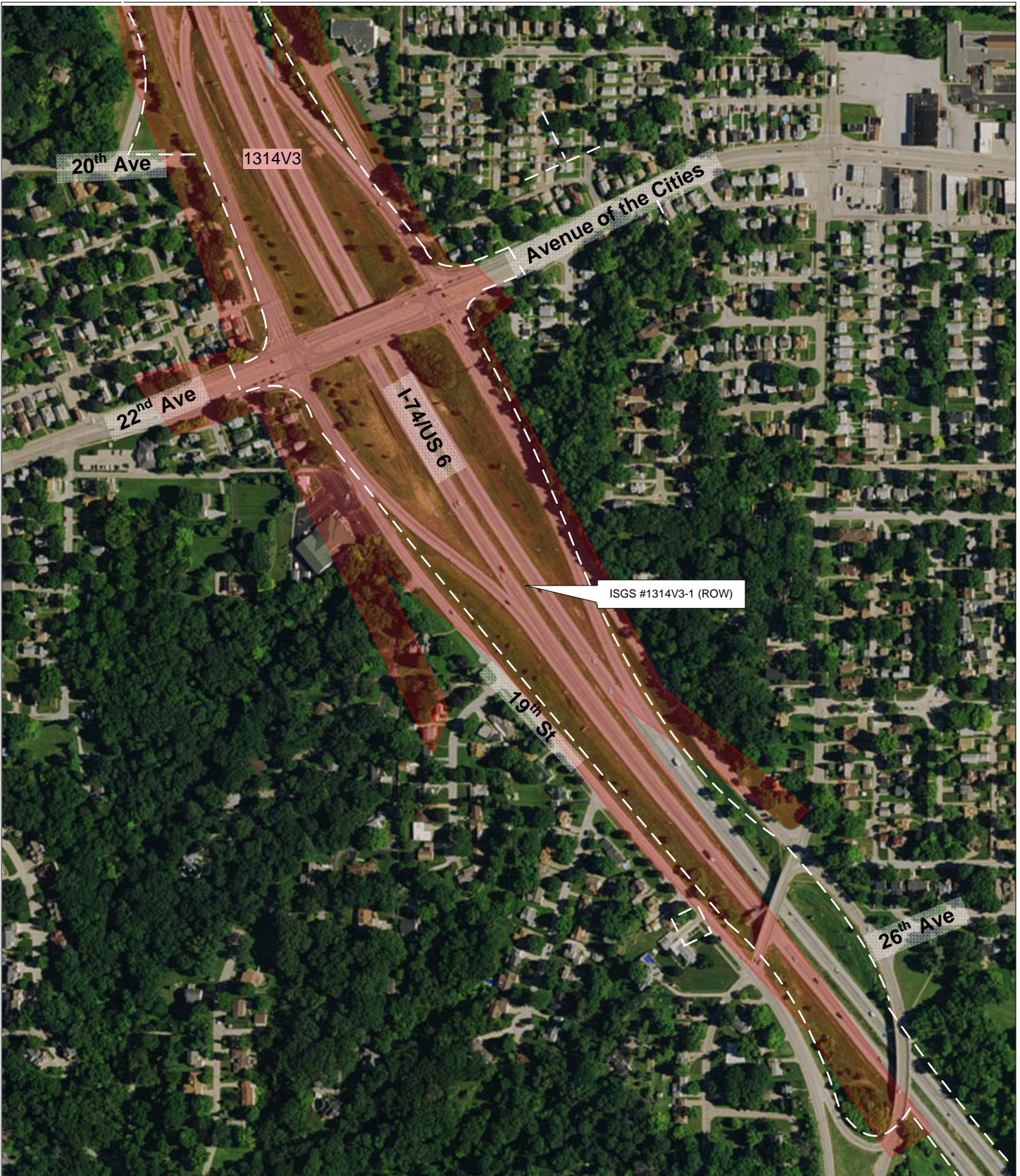
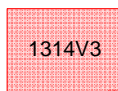
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FIGURE NO:  
2-2



**LEGEND**



1314V3

- ISGS PESA ROUTE



Illinois

**ecology and environment, inc.**  
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SITE AREA – CONTRACT 64E26 SOUTH

ROUTE: FAI 74 (I-74)

CITY: Moline

COUNTY: Rock Island

SCALE:



FIGURE NO:

2-3

# 3

## Field Investigation Procedures

E & E followed a project-specific investigative work plan (E & E 2016) in accordance with IDOT-approved standard operating procedures (SOPs) to achieve the objectives stated in Section 1 for the project area. The field investigation for this project included screening and sampling soil and groundwater at the site identified in Section 2. This section describes the procedures used for screening, sample collection, equipment decontamination, quality assurance, and sample custody.

### 3.1 Soil Boring and Sampling Procedures

E & E advanced 44 borings in the proposed construction area. E & E's truck-mounted Geoprobe<sup>®</sup> was used to advance twenty-nine of the borings, and fifteen borings were advanced using a stainless steel hand auger because they were either inaccessible to the truck-mounted Geoprobe<sup>®</sup>. A summary of the sampling and analysis program for this PSI is presented in Table 3-1.

Individual boring locations are identified with a unique alpha-numeric identification code. The first part of the boring identification is the site number designated by ISGS in the PESA (e.g., 1314V3-66 for ISGS site #1314V3-66 [Scottish Rite Masonic Church]). Following the ISGS site number is the boring identification number. Borings are numbered sequentially, with the initial boring at each site designated -B01 (e.g., for ISGS site #1314V3-66, the initial boring is designated 1314V3-66-B01).

Before advancing the borings, E & E personnel marked the proposed boring locations at the site and completed utility clearance. Of the 44 borings advanced, eleven borings were offset greater than 10 feet of their proposed locations to obtain Geoprobe access or to avoid underground utilities. E & E used a global positioning system (GPS) receiver to record the actual location of each boring upon its completion.

E & E conducted magnetometer surveys at ISGS 1314V3-66 and ISGS 1314V3-67 in an attempt to identify possible USTs within the proposed construction area, based on information presented in PESA 1314V3. After conducting visual surveys of the areas for fill pipes or other indicators of potential USTs, E & E screened the existing IDOT ROW at each site using a Schonstedt Instrument Co. Model GA-52B Magnetic Locator. The survey was conducted by walking across the ROW in transects and sweeping the instrument from side to side with the

small end of the instrument kept close to the ground. If a higher frequency tone was detected (indicative of buried metal), E & E attempted to further delineate the anomaly to determine if it could potentially be an UST or associated piping. Survey findings are discussed in Section 4.

E & E's Geoprobe<sup>®</sup> was equipped with 2-inch diameter Macro-Core<sup>®</sup> samplers. E & E used either a 4-foot-long or a 5-foot-long Macro-Core<sup>®</sup>, depending on the proposed boring depth. At locations sampled by the Geoprobe<sup>®</sup>, soil cores were collected from each boring by hydraulically pushing the Macro-Core<sup>®</sup> in 4- or 5-foot increments. E & E used a new PVC Macro-Core<sup>®</sup> liner for each sample interval and decontaminated the Macro-Core<sup>®</sup> sampler with an Alconox<sup>®</sup> and potable water solution between borings. A stainless steel hand auger was used to advance borings inaccessible to the Geoprobe<sup>®</sup> or at locations where the proposed maximum excavation depth was less than two feet bgs. The hand auger was decontaminated between boring locations using an Alconox<sup>®</sup> and water solution.

E & E used a calibrated photoionization detector (PID) to conduct headspace screening for volatile organic compounds (VOCs) on an aliquot of soil from each core in 2-foot intervals. The depth interval, recovery, soil description, headspace screening results, and any observations of staining and/or odors indicative of contamination were recorded for each Macro-Core<sup>®</sup> sample. Boring logs for this project are presented in Appendix B.

E & E collected 60 soil samples from the project area for laboratory analysis, including two duplicate samples. At the end of each field day, E & E shipped samples via overnight courier to TestAmerica Laboratories in University Park, Illinois (National Environmental Laboratory Accreditation Program [NELAP] number 100201). On the final day of sampling, E & E relinquished samples directly to the laboratory custodian. Sample identification, documentation, and chain-of-custody were conducted in accordance with the approved SOPs during collection, transportation, storage, and analysis of samples.

### **3.2 Groundwater Sampling Procedures**

E & E did not encounter groundwater during the site investigation for contract 64E26. Consequently, an assessment of groundwater impacts is not included in this report.



**Table 3-1 Summary of Sampling and Analysis Program  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID	Offset from Proposed Location <sup>a</sup>	Boring Depth (feet)	Matrix	Sample(s)	Parameters (Method) <sup>b</sup>				
					VOCs (8260B)	SVOCs (8270D)	Total Metals (6010B/7471A)	TCLP Metals (1311/6010B/6020A/7470A)	SPLP Metals (1312/6010B/6020A/7470A)
<b>ISGS #1314V3-1 (IDOT ROW)</b>									
1314V3-01-B12	Offset 11.8 feet west for Geoprobe access.	11	Soil	1314V3-01-B12 (0-6)	•	•	•	•	•
			Soil	1314V3-01-B12 (6-11)	•	•	•	•	•
1314V3-01-B13	--	5	Soil	1314V3-01-B13 (0-5)	•	•	•	•	•
1314V3-01-B14	--	12	Soil	1314V3-01-B14 (0-6)	•	•	•	•	•
			Soil	1314V3-01-B14 (6-12)	•	•	•	•	•
1314V3-01-B15	Offset 10 feet west-southwest for Geoprobe access.	13	Soil	1314V3-01-B15 (0-7)	•	•	•	•	•
			Soil	1314V3-01-B15 (7-13)	•	•	•	•	•
1314V3-01-B16	--	6	Soil	1314V3-01-B16 (0-6)	•	•	•	•	•
1314V3-01-B17	--	7	Soil	1314V3-01-B17 (0-7)	•	•	•	•	•
1314V3-01-B18	--	7	Soil	1314V3-01-B18 (0-7)	•	•	•	•	•
1314V3-01-B19	Offset 11.2 feet northeast for Geoprobe access.	5	Soil	1314V3-01-B19 (0-5)	•	•	•	•	•
1314V3-01-B20	Offset 26.8 feet east for Geoprobe access.	6	Soil	1314V3-01-B20 (0-6)	•	•	•	•	•
1314V3-01-B21 <sup>c</sup>	Offset 18.5 feet south-southeast due to steep concrete slope.	6	Soil	1314V3-01-B21 (0-6)	•	•	•	•	•
1314V3-01-B22	--	7	Soil	1314V3-01-B22 (0-7)	•	•	•	•	•
1314V3-01-B23	Offset 14.6 feet south-southwest for Geoprobe access.	8	Soil	1314V3-01-B23 (0-8)	•	•	•	•	•
1314V3-01-B24	--	4.5 <sup>d</sup>	Soil	1314V3-01-B24 (0-4.5)	•	•	•	•	•
1314V3-01-B25	Offset 29.7 feet west for Geoprobe access.	8.2 <sup>d</sup>	Soil	1314V3-01-B25 (0-8.2)	•	•	•	•	•
1314V3-01-B26 <sup>c</sup>	--	2	Soil	1314V3-01-B26 (0-2)	•	•	•	•	•
1314V3-01-B27	--	22	Soil	1314V3-01-B27 (0-8)	•	•	•	•	•
			Soil	1314V3-01-B27 (8-15)	•	•	•	•	•
			Soil	1314V3-01-B27 (15-22)	•	•	•	•	•
1314V3-01-B28	Offset 20.8 feet west-southwest for Geoprobe access.	4.5 <sup>d</sup>	Soil	1314V3-01-B28 (0-4.5)	•	•	•	•	•
1314V3-01-B29 <sup>c</sup>	Offset 40 feet south-southwest due to steep concrete slope.	5	Soil	1314V3-01-B29 (0-5)	•	•	•	•	•
1314V3-01-B30 <sup>c</sup>	--	6	Soil	1314V3-01-B30 (0-6)	•	•	•	•	•
1314V3-01-B31 <sup>c</sup>	--	6	Soil	1314V3-01-B31 (0-6)	•	•	•	•	•
1314V3-01-B32	--	6	Soil	1314V3-01-B32 (0-6)	•	•	•	•	•
1314V3-01-B33	--	2.5 <sup>d</sup>	Soil	1314V3-01-B33 (0-2.5)	•	•	•	•	•
1314V3-01-B34	--	20	Soil	1314V3-01-B34 (0-7)	•	•	•	•	•
			Soil	1314V3-01-B34 (7-14)	•	•	•	•	•
			Soil	1314V3-01-B34 (14-20)	•	•	•	•	•

**Table 3-1 Summary of Sampling and Analysis Program  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID	Offset from Proposed Location <sup>a</sup>	Boring Depth (feet)	Matrix	Sample(s)	Parameters (Method) <sup>b</sup>				
					VOCs (8260B)	SVOCs (8270D)	Total Metals (6010B/7471A)	TCLP Metals (1311/6010B/6020A/7470A)	SPLP Metals (1312/6010B/6020A/7470A)
1314V3-01-B35	Offset 23.4 feet east-northeast to avoid utilities.	20	Soil	1314V3-01-B35 (0-7)	•	•	•	•	•
			Soil	1314V3-01-B35 (0-7)D	•	•	•	•	•
			Soil	1314V3-01-B35 (7-14)	•	•	•	•	•
			Soil	1314V3-01-B35 (14-20)	•	•	•	•	•
1314V3-01-B36	--	28 <sup>d</sup>	Soil	1314V3-01-B36 (0-8)	•	•	•	•	•
			Soil	1314V3-01-B36 (8-16)	•	•	•	•	•
			Soil	1314V3-01-B36 (16-24)	•	•	•	•	•
			Soil	1314V3-01-B36 (24-28)	•	•	•	•	•
1314V3-01-B37 <sup>c</sup>	--	2	Soil	1314V3-01-B37 (0-2)	•	•	•	•	•
1314V3-01-B38 <sup>c</sup>	--	4	Soil	1314V3-01-B38 (0-4)	•	•	•	•	•
1314V3-01-B39 <sup>c</sup>	--	4	Soil	1314V3-01-B39 (0-4)	•	•	•	•	•
1314V3-01-B40 <sup>c</sup>	--	2	Soil	1314V3-01-B40 (0-2)	•	•	•	•	•
1314V3-01-B41 <sup>c</sup>	--	2	Soil	1314V3-01-B41 (0-2)	•	•	•	•	•
1314V3-01-B42 <sup>c</sup>	--	2	Soil	1314V3-01-B42 (0-2)	•	•	•	•	•
1314V3-01-B43 <sup>c</sup>	--	2	Soil	1314V3-01-B43 (0-2)	•	•	•	•	•
<b>ISGS #1314V3-66 (Scottish Rite Masonic Center)</b>									
1314V3-66-B01	--	7	Soil	1314V3-66-B01 (0-7)	•	•	•	•	•
			Soil	1314V3-66-B01 (0-7) D	•	•	•	•	•
1314V3-66-B02	--	6	Soil	1314V3-66-B02 (0-6)	•	•	•	•	•
<b>ISGS #1314V3-67 (Vacant Land)</b>									
1314V3-67-B01	--	9	Soil	1314V3-67-B01 (0-5)	•	•	•	•	•
			Soil	1314V3-67-B01 (5-9)	•	•	•	•	•
1314V3-67-B02	--	6	Soil	1314V3-67-B02 (0-6)	•	•	•	•	•
1314V3-67-B03	--	9 <sup>e</sup>	Soil	1314V3-67-B03 (0-4)	•	•	•	•	•
1314V3-67-B04	--	13	Soil	1314V3-67-B04 (0-7)	•	•	•	•	•
			Soil	1314V3-67-B04 (7-13)	•	•	•	•	•
1314V3-67-B05 <sup>c</sup>	Offset 14.4 feet north due to steep slope and obstruction (guardrail/fence).	6	Soil	1314V3-67-B05 (0-6)	•	•	•	•	•
1314V3-67-B06	--	4	Soil	1314V3-67-B06 (0-4)	•	•	•	•	•
1314V3-67-B07	--	4	Soil	1314V3-67-B07 (0-4)	•	•	•	•	•
1314V3-67-B08	--	4	Soil	1314V3-67-B08 (0-4)	•	•	•	•	•
<b>ISGS #1314V3-74 (Residence)</b>									
1314V3-74-B01 <sup>c</sup>	--	2	Soil	1314V3-74-B01 (0-2)	•	•	•	•	•

**Table 3-1 Summary of Sampling and Analysis Program  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID	Offset from Proposed Location <sup>a</sup>	Boring Depth (feet)	Matrix	Sample(s)	Parameters (Method) <sup>b</sup>				
					VOCs (8260B)	SVOCs (8270D)	Total Metals (6010B/7471A)	TCLP Metals (1311/6010B/6020A/7470A)	SPLP Metals (1312/6010B/6020A/7470A)
<b>ISGS #1314V3-75 (Residence)</b>									
1314V3-75-B01 <sup>c</sup>	--	2	Soil	1314V3-75-B01 (0-2)	•	•	•	•	•

Notes:

<sup>a</sup> Offsets are shown for borings moved a distance of 10 feet or greater from the proposed location.

<sup>b</sup> All of the samples were analyzed for pH and percent solids.

<sup>c</sup> Boring advanced with stainless steel hand auger.

<sup>d</sup> Boring terminated at depth due to refusal.

<sup>e</sup> Boring advanced to depth but a second sample was not collected due to lack of soil recovery.

Key:

ISGS = Illinois State Geological Survey.                      TCLP = Toxicity characteristic leaching procedure.  
 SPLP = Synthetic precipitation leaching procedure.        VOCs = Volatile organic compounds.  
 SVOCs = Semivolatile organic compounds.

# 4

## Field Investigation Results

This section presents the results of E & E's field investigation and includes a discussion of project area geology and topography, significant field observations, sampling rationale, and laboratory analytical results relative to applicable criteria.

E & E's field observations and sample selection rationale are summarized by site and boring in Table 4-1. Soil samples collected for laboratory analysis were analyzed for VOCs, semi-volatile organic compounds (SVOCs), and total and toxicity characteristic leaching procedure (TCLP) metals listed in 35 Illinois Administrative Code (IAC) 1100, Subpart F. Selected samples were analyzed for individual metals by synthetic precipitation leaching procedure (SPLP) analysis, based on TCLP analysis results, as discussed below.

Laboratory results were reviewed by E & E for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. The maximum detected concentrations of analytes in soil and a comparison with applicable reference concentrations are presented by site in Table 4-2. Analytes detected at concentrations above applicable reference concentrations are considered contaminants of concern (COCs). A discussion of the analytical results is presented below, and a summary of detected analytes is presented in Appendix C. Laboratory data packages, including E & E's data review, are included as Appendix D.

The detected analyte concentrations in soil are compared with the Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (MACs) presented in 35 IAC 1100, Subpart F and TACO Tier 1 Remediation Objectives (ROs) for residential ingestion and inhalation exposure presented in 35 IAC 742, Appendix B, Table A. When the MAC for an inorganic analyte is based on the Tiered Approach to Corrective Action Objectives (TACO) Class I soil component of the groundwater ingestion exposure route (SCGIER) presented in 35 IAC 742, Appendix B, Table C, the total concentration for the analyte is compared with the MAC, and the results of TCLP and SPLP analyses are independently compared with the TACO Class I SCGIER for the analyte found in 35 IAC 742, Appendix B, Table A. The analyte is considered to exceed the MAC if the total, TCLP, and SPLP results all exceed the applicable criteria.

When the MAC for a constituent is location-specific, the detected constituent concentration is also compared with the MAC for a metropolitan statistical area (MSA). Location-specific MACs have been established for arsenic, iron, manganese, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. Analytes detected at concentrations above applicable reference criteria in project area soil are considered COCs and are presented in Table 4-3.

E & E also evaluated sample pH levels and the results of soil headspace screening pursuant to 35 IAC 1100.201(g) and 205(b)(1), respectively. Soil pH must be between 6.25 and 9.0 standard units (SU) in order for the soil to be accepted at a clean construction or demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO). In addition, loads of soil exhibiting PID readings above background cannot be accepted by a CCDD facility or USFO. Table 4-3 presents a summary of COCs identified by boring and sample for each site.

When one or more COCs are detected in a boring, aggregate areas of impacted soil are delineated without regard for property boundaries or planned excavation activities. The areal extent of impacted soil at an individual boring is represented by a rectangle centered on the boring and extending from the centerline of the roadway to the construction limit. The rectangle will extend laterally one-half the distance between the affected boring and the next adjacent boring that does not contain a COC. If no adjacent borings are present, the impacted area will extend laterally 50 feet in each direction.

When the estimated impacted area at a boring extends to an adjacent site, the impacts are also assumed for the applicable area of the adjacent site in the calculation of impacted construction quantities. The impacted soil excavation quantities for construction are calculated based on the assumption that the impacted soil extends from the ground surface to the proposed excavation depth for the construction feature within the impacted area.

E & E's field investigation was designed to provide an initial characterization of site conditions at pre-designated boring locations. The investigation was limited in terms of analytical parameters and the number of samples collected, based on the site information presented in ISGS PESA #1314V3. Consequently, the findings and conclusions of this investigation are subject to revision if more site data become available.

#### **4.1 Project Area Geology and Topography**

E & E advanced 44 soil borings for this project to depths ranging from approximately two to 28 feet bgs. Observations of subsurface materials in the project area are described for each of the soil borings in Appendix B. The following information was provided by ISGS PESA #1314V3:

*The topmost bedrock unit in the project area from the Mississippi River to 14<sup>th</sup> Street has been mapped as rocks of the Muscatatuck Group of Devonian age, which consist primarily of limestones. The topmost bedrock unit in the project area from 14th Street to 18th Street has been mapped as rocks of the New Albany Formation of Devonian age, which consist primarily of shales. The topmost bedrock unit in the project area from the 18th Street to 23rd Street has been mapped as rocks of the Tradewater Formation of Mississippian age, which consist primarily of shales, limestones, and sandstones.*

*The total thickness of surficial deposits in the project area have been mapped as less than 50 feet thick. Surficial deposits from 6th Avenue to 15th Avenue have been mapped as silts of the Peoria and Roxana Silt, less than 20 feet in thickness overlying silts and clays of the Glasford Formation, less than 20 feet in total thickness. Surficial deposits from 15th Avenue to 23rd Street have been mapped as silts of the Peoria and Roxana Silt, greater than 20 feet in total thickness.*

*Along the project ROW, the Natural Resources Conservation Service (NRCS) has not classified any soils as containing 33 to 100 percent hydric components. The NRCS has classified the Orthents, loamy, undulating; Hickory-Sylvan silt loams, 35 to 60 percent slopes; Hickory-Sylvan-Fayette silt loams, 10 to 18 percent slopes, eroded; and Hickory-Sylvan-Fayette silt loams, 18 to 30 percent slopes as non-prime farmland.*

*Surficial drainage in the project area is generally toward the north in the direction of the Mississippi River. However, since the project area is urbanized and storm drains and sewers are present, most surficial runoff will be controlled by the storm sewer system; such systems typically are designed to follow natural drainage patterns. Neither the near-surface nor the shallow unconfined groundwater flow direction was specifically determined for this project, but they generally mimic local topography.*

The stratigraphy of the boreholes advanced during E & E's investigation revealed fill material in ten of the 44 borings. The fill consisted of concrete, sand, gravel, and reworked native material and ranged in thickness from less than one foot to 10 feet. Native materials encountered during this investigation were grey to dark brown stiff clay, sometimes with trace gravel, consistent with either the Peoria silt or Glasford formation, and light brown clayey silt consistent with the Roxana silt. Groundwater was not encountered in any of the borings advanced for this investigation.

## **4.2 ISGS #1314V3-1 (IDOT ROW)**

### **4.2.1 Field Observations at ISGS #1314V3-1**

E & E advanced 32 borings (1314V3-01-B12 through 1314V3-01-B43) at ISGS #1314V3-1 (IDOT ROW) (see Table 4-1 and Figures 4-1, 4-6, 4-7, and 4-8).

Borings 1314V3-01-B21, 1314V3-01-B26, 1314V3-01-B29, 1314V3-01-B30,

1314V3-01-B31, and 1314V3-01-B37 through 1314V3-01-B43 were advanced with a stainless steel hand auger. A groundwater sample was proposed at this site; however, E & E did not encounter groundwater in any of the borings advanced at the site.

Six borings were completed at depths shallower than the proposed depths due to refusal (see Table 3-1); consequently, E & E collected only one soil sample from the following borings:

- 1314V3-01-B25
- 1314V3-01-B26
- 1314V3-01-B28
- 1314V3-01-B30

E & E noted the presence of VOCs during PID headspace screening of soil from the 8- to 10-foot depth interval of boring 1314V3-01-B27. A reading of 0.2 MU was detected in sample. E & E also noted a slight unidentified odor from the soil at the 8- to 10-foot depth interval.

Table 4-1 lists the sample intervals collected from each boring for laboratory analysis. E & E collected a duplicate soil sample at boring 1314V3-01-B35.

#### **4.2.2 Analytical Results for ISGS #1314V3-1**

Five VOCs were detected in the samples from this site (see Table 4-2). Twenty-one SVOCs, primarily PAHs, were detected in the site samples. Twenty-two metals were detected in the site samples, and ten of the metals were detected by TCLP analysis. Based on the TCLP metals results, 41 of the samples were analyzed for SPLP manganese, six samples were analyzed for SPLP lead, and one sample each was analyzed for cadmium and iron. Manganese (39 samples), lead (six samples), and iron (one sample) were detected by SPLP analysis. SPLP cadmium was not detected. Sample pH levels ranged from 7.5 to 9.7 SU.

#### **4.2.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #1314V3-1**

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, lead, iron, and manganese were detected above reference concentrations in soil at the site (see Table 4-3).

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected at concentrations above MSA MACs in samples 1314V3-01-B27 (0-8) and 1314V3-01-B27 (8-15). Carbazole and naphthalene were also detected above their MACs in sample 1314V3-01-B27 (8-15). The PAH concentrations in the samples also exceeded applicable TACO Tier 1 soil ROs for residential properties.

Benzo(a)pyrene was detected at concentrations above the most stringent MAC, but below the Chicago and MSA MACs in samples 1314V3-01-B26 (0-2) and 1314V3-01-B33 (0-2.5).

Lead was detected above applicable reference concentrations by total, TCLP, and SPLP analyses in samples 1314V3-01-B27 (0-8) and 1314V3-01-B42 (0-2). The total lead concentration in sample 1314V3-01-B27 (0-8) also exceeded the TACO Tier 1 soil ROs for residential and construction worker exposure. Manganese was detected above applicable reference concentrations by total, TCLP, and SPLP analyses in sample 1314V3-01-B32 (0-6).

TCLP and SPLP manganese were detected above the TACO Class 1 SCGIER in the following samples; however, the total manganese concentrations detected in the samples were below the most stringent MAC.

- 1314V3-01-B12 (0-6)
- 1314V3-01-B13 (0-5)
- 1314V3-01-B14 (0-6)
- 1314V3-01-B14 (6-12)
- 1314V3-01-B15 (7-13)
- 1314V3-01-B19 (0-5)
- 1314V3-01-B20 (0-6)
- 1314V3-01-B21 (0-6)
- 1314V3-01-B22 (0-7)
- 1314V3-01-B24 (0-4.5)
- 1314V3-01-B26 (0-2)
- 1314V3-01-B27 (0-8)
- 1314V3-01-B27 (8-15)
- 1314V3-01-B27 (15-22)
- 1314V3-01-B28 (0-4.5)
- 1314V3-01-B29 (0-5)
- 1314V3-01-B30 (0-6)
- 1314V3-01-B31 (0-6)
- 1314V3-01-B34 (0-7)
- 1314V3-01-B34 (7-14)
- 1314V3-01-B34 (14-20)
- 1314V3-01-B35 (0-7)
- 1314V3-01-B35 (0-7)D
- 1314V3-01-B35 (7-14)
- 1314V3-01-B35 (14-20)
- 1314V3-01-B36 (0-8)
- 1314V3-01-B36 (8-16)
- 1314V3-01-B36 (16-24)
- 1314V3-01-B37 (0-2)
- 1314V3-01-B38 (0-4)
- 1314V3-01-B40 (0-2)
- 1314V3-01-B41 (0-2)
- 1314V3-01-B43 (0-2)

TCLP and SPLP iron were detected above the TACO Class 1 SCGIER in sample 1314V3-01-B14 (6-12); however, the total iron concentration detected in the sample was below the most stringent MAC. TCLP and SPLP lead were detected above the TACO Class 1 SCGIER in samples 1314V3-01-B35 (0-7), 1314V3-01-B36 (8-16), and 1314V3-01-B43 (0-2); however, the total lead concentrations detected in the samples were below the MAC.

No other COCs were identified at the site. Iron was detected at concentrations above MACs in samples 1314V3-01-B14 (0-6), 1314V3-01-B36 (8-16), 1314V3-



01-B37 (0-2), and 1314V3-01-B42 (0-2); however, TCLP iron was not detected above the TACO Class 1 SCGIER in any of the samples. Chromium was detected at concentrations above the MAC in samples 1314V3-01-B26 (0-2) and 1314V3-01-B27 (0-8), but chromium was not detected in the samples by TCLP analysis. TCLP manganese was detected at concentrations above the TACO Class 1 SCGIER in samples 1314V3-01-B15 (0-7), 1314V3-01-B16 (0-6), 1314V3-01-B17 (0-7), 1314V3-01-B18 (0-7), 1314V3-01-B23 (0-8), 1314V3-01-B25 (0-8.2), and 1314V3-01-B36 (24-28); however, manganese was not detected above applicable reference concentrations by total and SPLP analyses. TCLP cadmium was detected at a concentration above the TACO Class 1 SCGIER in sample 1314V3-01-B27 (0-8); however, cadmium was not detected above applicable reference concentrations by total and SPLP analyses.

VOCs were detected during PID headspace screening of soil at boring 1314V3-01-B27. Although the readings were within background levels, E & E also noted an odor from the soil that exhibited PID readings, indicative of potential chemical contamination.

The following soil samples exhibited pH levels above the acceptable range for management of the soil at a CCDD facility or USFO:

- 1314V3-01-B13 (0-5): 9.1 SU
- 1314V3-01-B27 (0-8): 9.1 SU
- 1314V3-01-B28 (0-4.5): 9.4 SU
- 1314V3-01-B29 (0-5): 9.4 SU
- 1314V3-01-B30 (0-6): 9.7 SU
- 1314V3-01-B33 (0-2.5): 9.1 SU
- 1314V3-01-B37 (0-2): 9.2 SU
- 1314V3-01-B42 (0-2): 9.1 SU

#### **4.2.4 IDOT Construction Activities at ISGS #1314V3-1**

Construction activities anticipated at this site include road reconstruction, grading, and bridge pier, retaining wall, and storm sewer installation (see Figures 4-1, 4-6, 4-7, and 4-8). Excavations associated with the improvements are estimated to extend to a maximum depth of 22.8 feet bgs.

The assumed areas of impact and COCs are depicted on Figures 4-1 through 4-8. Table 4-4 presents an estimated volume of impacted soil within the proposed construction excavation area that will require proper handling and disposal if removed from the site. The estimated volume of impacted soil was determined using excavation dimensions provided by IDOT.

### **4.3 ISGS #1314V3-66 (Scottish Rite Masonic Center)**

#### **4.3.1 Field Observations at ISGS #1314V3-66**

E & E advanced two borings (1314V3-66-B01 and 1314V3-66-B02) at ISGS #1314V3-66 (Scottish Rite Masonic Center) (see Table 4-1 and Figure 4-1). VOCs were not detected during headspace screening of site soils, and the soils did not exhibit discoloration or odors indicative of potential chemical contamination. E & E collected one sample from each boring for laboratory analysis. A duplicate soil sample was collected at boring 1314V3-66-B01. A groundwater sample was not proposed at this site, and E & E did not encounter groundwater in either of the borings advanced at the site.

E & E conducted a magnetometer survey at the site in an attempt to identify potential USTs within the project construction area. E & E surveyed the construction area within existing IDOT ROW along 19<sup>th</sup> Street. E & E did not observe any anomalies indicative of an UST during the survey.

#### **4.3.2 Analytical Results for ISGS #1314V3-66**

VOCs were not detected in soil from this site (see Table 4-2). Ten SVOCs, all PAHs, were detected in the site samples. Twenty-two metals were detected in the site samples, and five of the metals were detected by TCLP analysis. Based on the TCLP metals results, sample 1314V3-66-B01 (0-7) was analyzed for SPLP manganese and sample 1314V3-66-B01 (0-7)D was analyzed for SPLP lead. The metals were detected in the respective samples by SPLP analysis. The sample pH levels were 8.6, 8.8, and 8.2 SU.

#### **4.3.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #1314V3-66**

Lead and manganese were detected above reference concentrations in soil at the site (see Table 4-3). TCLP and SPLP manganese were detected above the TACO Class 1 SCGIER in sample 1314V3-66-B01 (0-7); however, the total manganese concentration detected in the sample was below the most stringent MAC. TCLP and SPLP lead were detected above the TACO Class 1 SCGIER in duplicate sample 1314V3-66-B01 (0-7)D; however, the total lead concentration detected in the sample was below the MAC.

No other COCs were identified at the site. Total manganese was detected at a concentration above the most stringent MAC in sample 1314V3-66-B02 (0-6) but manganese was not detected in the sample by TCLP analysis. VOCs were not detected during headspace screening of site soil and the sample pH levels were within the acceptable range for management of the soil at a CCDD facility or USFO.

#### **4.3.4 IDOT Construction Activities at ISGS #1314V3-66**

Construction activities anticipated at this site include road reconstruction, and installation of a retaining wall and storm sewers (see Figure 4-1). Excavations

associated with the improvements are estimated to extend to a maximum depth of 6.3 feet bgs.

The assumed areas of impact and COCs are depicted on Figures 4-1 and 4-4. Table 4-4 presents an estimated volume of impacted soil within the proposed construction excavation area that will require proper handling and disposal if removed from the site. The estimated volume of impacted soil was determined using excavation dimensions provided by IDOT.

#### **4.4 ISGS #1314V3-67 (Vacant Land)**

##### **4.4.1 Field Observations at ISGS #1314V3-67**

E & E advanced eight borings (1314V3-67-B01 through 1314V3-67-B08) at ISGS #1314V3-67 (Vacant Land) (see Table 4-1 and Figure 4-1). Boring 1314V3-67-B03 was advanced to the proposed depth of nine feet bgs; however, only one sample was collected from this boring due the lack of soil recovery from the 5- to 9-foot depth interval. A groundwater sample was proposed at this site; however, E & E did not encounter groundwater in any of the borings advanced at the site.

VOCs were not detected during headspace screening of site soils, and the soils did not exhibit discoloration or odors indicative of potential chemical contamination.

Table 4-1 lists the sample intervals collected from each boring for laboratory analysis.

E & E conducted a magnetometer survey at ISGS #1314V3-67 (Vacant Land) in an attempt to identify potential USTs within the project construction area. E & E surveyed the construction area within existing IDOT ROW along 19<sup>th</sup> Street and 7<sup>th</sup> Avenue. E & E did not observe any anomalies indicative of an UST during the survey.

##### **4.4.2 Analytical Results for ISGS #1314V3-67**

VOCs were not detected in soil from this site (see Table 4-2). Thirteen SVOCs, primarily PAHs, were detected in the site samples. Three or more SVOCs were detected in seven of the 10 site samples. Twenty-two metals were detected in the samples, and eight of the metals were detected by TCLP analysis. Based on the TCLP metals results, seven samples were analyzed for SPLP manganese, and three samples were analyzed for SPLP lead. Manganese and lead were detected in each of the respective samples. The sample pH levels ranged from 7.9 to 9 SU.

##### **4.4.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #1314V3-67**

Lead and manganese were detected above reference concentrations in soil at the site (see Table 4-3). TCLP and SPLP manganese were detected above the TACO Class 1 SCGIER in samples from borings 1314V3-67-B01, 1314V3-67-B03, 1314V3-67-B04, 1314V3-67-B05, and 1314V3-67-B06; however, the total man-

ganese concentrations detected in the samples were below the most stringent MAC.

TCLP and SPLP lead were detected above the TACO Class 1 SCGIER in samples from borings 1314V3-67-B01 and 1314V3-67-B04; however, the total lead concentrations detected in the samples were below the MAC.

No other COCs were identified at the site. Total manganese was detected at a concentration above MACs in sample 1314V3-67-B02 (0-6) but manganese was not detected above the reference concentration by TCLP analysis. VOCs were not detected during headspace screening of site soil, and the sample pH levels were within the acceptable range for management of the soil at a CCDD facility or USFO.

#### **4.4.4 IDOT Construction Activities at ISGS #1314V3-67**

Construction activities anticipated at this site include grading, road reconstruction, and storm sewer installation (see Figure 4-1). Excavations associated with the improvements are estimated to extend to a maximum depth of 10.5 feet bgs.

The assumed areas of impact and COCs are depicted on Figures 4-1 and 4-5. Table 4-4 presents an estimated volume of impacted soil within the proposed construction excavation area that will require proper handling and disposal if removed from the site. The estimated volume of impacted soil was determined using excavation dimensions provided by IDOT.

### **4.5 ISGS #1314V3-74 (Residence)**

#### **4.5.1 Field Observations at ISGS #1314V3-74**

E & E advanced one boring (1314V3-74-B01) at ISGS #1314V3-74 (Residence) (see Table 4-1 and Figure 4-6). The boring was advanced with a stainless steel hand auger. VOCs were not detected during headspace screening of site soil, and the soil did not exhibit discoloration or odors indicative of potential chemical contamination. E & E collected one sample from the boring for laboratory analysis. A groundwater sample was not proposed at this site, and E & E did not encounter groundwater in the site boring.

#### **4.5.2 Analytical Results for ISGS #1314V3-74**

VOCs were not detected in soil from this site (see Table 4-2). Eleven SVOCs, all PAHs, were detected in the site sample. Twenty-two metals were detected in the site sample, and three of the metals were detected by TCLP analysis. The sample was analyzed for SPLP manganese based on the TCLP metals results, and manganese was detected in the sample by SPLP analysis. The sample pH was 9.0 SU.

#### **4.5.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #1314V3-74**

Manganese was detected above reference concentration in soil at the site (see Table 4-3). TCLP and SPLP manganese were detected above the TACO Class 1

SCGIER; however, the total manganese concentration detected in the sample was below the most stringent MAC.

No other COCs were identified at the site. VOCs were not detected during head-space screening of site soil and the sample pH was within the acceptable range for management of the soil at a CCDD facility or USFO.

#### **4.5.4 IDOT Construction Activities at ISGS #1314V3-74**

Construction activities anticipated at this site include road reconstruction and storm sewer installation (see Figure 4-1). Excavations associated with the improvements are estimated to extend to a maximum depth of 1.4 feet bgs.

The assumed areas of impact and COCs are depicted on Figure 4-6. Table 4-4 presents an estimated volume of impacted soil within the proposed construction excavation area that will require proper handling and disposal if removed from the site. The estimated volume of impacted soil was determined using excavation dimensions provided by IDOT.

### **4.6 ISGS #1314V3-75 (Residence)**

#### **4.6.1 Field Observations at ISGS #1314V3-75**

E & E advanced one boring (1314V3-75-B01) at ISGS #1314V3-75 (Residence) (see Table 4-1 and Figure 4-6). The boring was advanced with a stainless steel hand auger. VOCs were not detected during headspace screening of site soil, and the soil did not exhibit discoloration or odors indicative of potential chemical contamination. E & E collected one sample from the boring for laboratory analysis. A groundwater sample was not proposed at this site, and E & E did not encounter groundwater in the site boring.

#### **4.6.2 Analytical Results for ISGS #1314V3-75**

VOCs were not detected in soil from this site (see Table 4-2). Eleven SVOCs, all PAHs, were detected in the site sample. Twenty-three metals were detected in the site sample, and five of the metals were detected by TCLP analysis. The sample was analyzed for SPLP lead and manganese based on the TCLP metals results, and both metals were detected in the sample by SPLP analysis. The sample pH was 9.1 SU.

#### **4.6.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #1314V3-75**

Lead and manganese were detected above reference concentrations in soil at the site (see Table 4-3). TCLP and SPLP lead and manganese were detected above their respective TACO Class 1 SCGIERS; however, the total metals concentrations were below the respective reference concentrations.

No other COCs were identified at the site. Total iron was detected at a concentration above the most stringent MAC, but iron was not detected by TCLP analysis. VOCs were not detected during headspace screening of site soil; however,

the sample pH of 9.1 SU was above the acceptable range for management of the soil at a CCDD facility or USFO.

#### **4.6.4 IDOT Construction Activities at ISGS #1314V3-75**

Construction activities anticipated at this site include road reconstruction (see Figure 4-1). Excavations associated with the improvements are estimated to extend to a maximum depth of 1.4 feet bgs.

The assumed areas of impact and COCs are depicted on Figure 4-6. Table 4-4 presents an estimated volume of impacted soil within the proposed construction excavation area that will require proper handling and disposal if removed from the site. The estimated volume of impacted soil was determined using excavation dimensions provided by IDOT.

**Table 4-1 Field Observations and Sampling Rationale  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Magnetometer Survey Conducted?	Evidence of UST?	Boring ID	Depth to Groundwater (feet)	Range of PID Readings (meter units)	Observed Evidence of Potential Contamination	Depth Interval(s) Sampled (feet)	Rationale	
<b>ISGS #1314V3-1 (IDOT ROW)</b>								
No	NA	1314V3-01-B12	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	
						6-12	Sampled within proposed construction excavation depth.	
		1314V3-01-B13	--	None detected	None	0-5	Sampled within proposed construction excavation depth.	
		1314V3-01-B14	--	None detected	None	None	0-6	Sampled within proposed construction excavation depth.
							6-12	Sampled within proposed construction excavation depth.
		1314V3-01-B15	--	None detected	None	None	0-7	Sampled within proposed construction excavation depth.
							7-13	Sampled within proposed construction excavation depth.
		1314V3-01-B16	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	
		1314V3-01-B17	--	None detected	None	0-7	Sampled within proposed construction excavation depth.	
		1314V3-01-B18	--	None detected	None	0-7	Sampled within proposed construction excavation depth.	
		1314V3-01-B19	--	None detected	None	0-5	Sampled within proposed construction excavation depth.	
		1314V3-01-B20	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	
		1314V3-01-B21	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	
		1314V3-01-B22	--	None detected	None	0-7	Sampled within proposed construction excavation depth.	
		1314V3-01-B23	--	None detected	None	0-8	Sampled within proposed construction excavation depth.	
		1314V3-01-B24	--	None detected	None	0-4.5	Sampled within proposed construction excavation depth.	
		1314V3-01-B25	--	None detected	None	0-8.2	Sampled within proposed construction excavation depth.	
		1314V3-01-B26	--	None detected	None	0-2	Sampled within proposed construction excavation depth.	
		1314V3-01-B27	--	0.0 - 0.2	Slight odor from 8 to 10 feet bgs.	0-8	Sampled within proposed construction excavation depth.	
						8-15	Sampled within proposed construction excavation depth.	
						15-22	Sampled within proposed construction excavation depth.	
		1314V3-01-B28	--	None detected	None	0-4.5	Sampled within proposed construction excavation depth.	
		1314V3-01-B29	--	None detected	None	0-5	Sampled within proposed construction excavation depth.	
		1314V3-01-B30	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	
		1314V3-01-B31	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	
		1314V3-01-B32	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	

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**Table 4-1 Field Observations and Sampling Rationale  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Magnetometer Survey Conducted?	Evidence of UST?	Boring ID	Depth to Groundwater (feet)	Range of PID Readings (meter units)	Observed Evidence of Potential Contamination	Depth Interval(s) Sampled (feet)	Rationale	
No	NA	1314V3-01-B33	--	None detected	None	0-2.5	Sampled within proposed construction excavation depth.	
		1314V3-01-B34	--	None detected	None	0-7	Sampled within proposed construction excavation depth.	
						7-14	Sampled within proposed construction excavation depth.	
		1314V3-01-B35	--	None detected	None	14-20	Sampled within proposed construction excavation depth.	
						0-7	Sampled within proposed construction excavation depth.	
						7-14	Sampled within proposed construction excavation depth.	
		1314V3-01-B36	--	None detected	None	14-20	Sampled within proposed construction excavation depth.	
						0-8	Sampled within proposed construction excavation depth.	
						8-16	Sampled within proposed construction excavation depth.	
						16-24	Sampled within proposed construction excavation depth.	
		1314V3-01-B37	--	None detected	None	None	24-28	Sampled within proposed construction excavation depth.
							0-2	Sampled within proposed construction excavation depth.
							0-4	Sampled within proposed construction excavation depth.
							0-4	Sampled within proposed construction excavation depth.
0-2	Sampled within proposed construction excavation depth.							
0-2	Sampled within proposed construction excavation depth.							
0-2	Sampled within proposed construction excavation depth.							
1314V3-01-B41	--	None detected	None	0-2	Sampled within proposed construction excavation depth.			
1314V3-01-B42	--	None detected	None	0-2	Sampled within proposed construction excavation depth.			
1314V3-01-B43	--	None detected	None	0-2	Sampled within proposed construction excavation depth.			
<b>ISGS #1314V3-66 (Scottish Rite Masonic Center)</b>								
Yes	No	1314V3-66-B01	--	None detected	None	0-7	Sampled within proposed construction excavation depth.	
		1314V3-66-B02	--	None detected	None	0-6	Sampled within proposed construction excavation depth.	

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**Table 4-1 Field Observations and Sampling Rationale  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Magnetometer Survey Conducted?	Evidence of UST?	Boring ID	Depth to Groundwater (feet)	Range of PID Readings (meter units)	Observed Evidence of Potential Contamination	Depth Interval(s) Sampled (feet)	Rationale
<b>ISGS #1314V3-67 (Vacant Land)</b>							
Yes	No	1314V3-67-B01	--	None detected	None	0-5	Sampled within proposed construction excavation depth.
		1314V3-67-B02	--	None detected	None	5-9	Sampled within proposed construction excavation depth.
		1314V3-67-B03	--	None detected	None	0-6	Sampled within proposed construction excavation depth.
		1314V3-67-B04	--	None detected	None	0-4	Sampled within proposed construction excavation depth.
		1314V3-67-B04	--	None detected	None	0-7	Sampled within proposed construction excavation depth.
		1314V3-67-B04	--	None detected	None	7-13	Sampled within proposed construction excavation depth.
		1314V3-67-B05	--	None detected	None	0-6	Sampled within proposed construction excavation depth.
		1314V3-67-B06	--	None detected	None	0-4	Sampled within proposed construction excavation depth.
1314V3-67-B07	--	None detected	None	0-4	Sampled within proposed construction excavation depth.		
1314V3-67-B08	--	None detected	None	0-4	Sampled within proposed construction excavation depth.		
<b>ISGS #1314V3-74 (Residence)</b>							
No	NA	1314V3-74-B01	--	None detected	None	0-2	Sampled within proposed construction excavation depth.
<b>ISGS #1314V3-75 (Residence)</b>							
No	NA	1314V3-75-B01	--	None detected	None	0-2	Sampled within proposed construction excavation depth.

Key:

BGS = Below ground surface.

ISGS = Illinois State Geological Survey.

NA = Not applicable.

PID = Photoionization detector.

-- = Groundwater was not encountered in the boring.

UST = Underground storage tank.

**Table 4-2 Detected Soil Analytes and Comparison with Applicable Criteria  
FAI 74 (Interstate 74), Contract No. 64E26  
Moline, Rock Island County, Illinois**

Chemical	Maximum Detected Concentration	Maximum Allowable Concentrations		TACO Remediation Objectives	
		Most Stringent	Within an MSA	Construction Worker Exposure	Groundwater Protection (TCLP/SPLP)
<b>ISGS #1314V3-1 (ROW)</b>					
<b>VOCs (mg/Kg)</b>					
Acetone	0.036	25	--	100,000	--
Ethylbenzene	0.045	13	--	58	--
Tetrachloroethene	0.0025	0.06	--	28	--
Toluene	0.0078	12.0	--	42	--
Xylenes, Total	0.27	5.6	--	5.6	--
<b>SVOCs (mg/Kg)</b>					
2-Methylnaphthalene	19.0	--	--	--	--
3,3'-Dichlorobenzidine	0.15	1.3	--	280	--
Acenaphthene	33.0	570	--	120,000	--
Acenaphthylene	0.91	--	--	--	--
Anthracene	22.0	12,000	--	610,000	--
Benzo(a)anthracene	<b>18.0</b>	0.9	1.8	170	--
Benzo(a)pyrene	<b>11.0</b>	0.09	2.1	17	--
Benzo(b)fluoranthene	<b>17.0</b>	0.9	2.1	170	--
Benzo(g,h,i)perylene	6.	--	--	--	--
Benzo(k)fluoranthene	5.9	9.0	--	1,700	--
Bis(2-ethylhexyl) phthalate	0.69	46	--	4,100	--
Carbazole	<b>4.8</b>	0.6	--	6,200	--
Chrysene	18.0	88	--	17,000	--
Dibenz(a,h)anthracene	<b>2.1</b>	0.09	0.42	17	--
Dibenzofuran	24.0	--	--	--	--
Fluoranthene	74.0	3,100	--	82,000	--
Fluorene	32.0	560	--	82,000	--
Indeno(1,2,3-cd)pyrene	<b>5.8</b>	0.9	1.6	170	--
Naphthalene	<b>15.0</b>	1.8	--	1.8	--
Phenanthrene	98.0	--	--	--	--
Pyrene	45.0	2,300	--	61,000	--
<b>Inorganics (mg/Kg)</b>					
Antimony	0.6	5.0	--	82	--
Arsenic	6.5	11.3	13	61	--
Barium	220	1,500	--	14,000	--
Beryllium	0.72	22	--	410	--
Boron	9.7	40	--	41,000	--
Cadmium	1.2	5.2	--	200	--
Calcium	110,000	--	--	--	--
Chromium	<b>26.0</b>	21	--	690	--
Cobalt	11.0	20	--	12,000	--
Copper	51.0	2,900	--	8,200	--
Iron	<b>18,000</b>	15,000	15,900	--	--
Lead	<b>1,600</b>	107	--	700	--
Magnesium	32,000	325,000	--	730,000	--
Manganese	<b>930</b>	630	636	4,100	--
Mercury	0.19	0.89	--	0.1	--
Nickel	27.0	100	--	4,100	--

Maximum detected concentrations above the most stringent Maximum Allowable Concentration are shaded. See note at end of table.

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**Table 4-2 Detected Soil Analytes and Comparison with Applicable Criteria  
FAI 74 (Interstate 74), Contract No. 64E26  
Moline, Rock Island County, Illinois**

Chemical	Maximum Detected Concentration	Maximum Allowable Concentrations		TACO Remediation Objectives	
		Most Stringent	Within an MSA	Construction Worker Exposure	Groundwater Protection (TCLP/SPLP)
<b>ISGS #1314V3-1 (ROW)</b>					
<b>Inorganics (mg/Kg)</b>					
Potassium	1,300	--	--	--	--
Selenium	1.	1.3	--	1,000	--
Sodium	1,500	--	--	--	--
Thallium	1.	2.6	--	160	--
Vanadium	25.0	550	--	1,400	--
Zinc	680	5,100	--	61,000	--
<b>TCLP Metals (mg/L)</b>					
Barium	1.2	--	--	--	2.0
Boron	0.12	--	--	--	2.0
Cadmium	<b>0.0086</b>	--	--	--	0.005
Cobalt	0.048	--	--	--	1.0
Iron	12.0	--	--	--	5.0
Lead	<b>0.37</b>	--	--	--	0.0075
Manganese	<b>10.0</b>	--	--	--	0.15
Nickel	0.055	--	--	--	0.1
Selenium	0.025	--	--	--	0.05
Zinc	0.97	--	--	--	5.0
<b>SPLP Metals (mg/L)</b>					
Iron	<b>69.0</b>	--	--	--	5.0
Lead	<b>1.4</b>	--	--	--	0.0075
Manganese	<b>1.9</b>	--	--	--	0.15
<b>ISGS #1314V3-66 (Scottish Rite Masonic Center)</b>					
<b>SVOCs (mg/Kg)</b>					
Benzo(a)anthracene	0.029	0.9	1.8	170	--
Benzo(a)pyrene	0.04	0.09	2.1	17	--
Benzo(b)fluoranthene	0.059	0.9	2.1	170	--
Benzo(g,h,i)perylene	0.023	--	--	--	--
Benzo(k)fluoranthene	0.022	9.0	--	1,700	--
Chrysene	0.039	88	--	17,000	--
Fluoranthene	0.088	3,100	--	82,000	--
Indeno(1,2,3-cd)pyrene	0.029	0.9	1.6	170	--
Phenanthrene	0.033	--	--	--	--
Pyrene	0.065	2,300	--	61,000	--
<b>Inorganics (mg/Kg)</b>					
Antimony	0.25	5.0	--	82	--
Arsenic	7.7	11.3	13	61	--
Barium	91.0	1,500	--	14,000	--
Beryllium	0.53	22	--	410	--
Boron	2.5	40	--	41,000	--
Cadmium	0.24	5.2	--	200	--
Calcium	15,000	--	--	--	--
Chromium	11.0	21	--	690	--
Cobalt	6.6	20	--	12,000	--
Copper	11.0	2,900	--	8,200	--

Maximum detected concentrations above the most stringent Maximum Allowable Concentration are shaded. See note at end of table.

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**Table 4-2 Detected Soil Analytes and Comparison with Applicable Criteria  
FAI 74 (Interstate 74), Contract No. 64E26  
Moline, Rock Island County, Illinois**

Chemical	Maximum Detected Concentration	Maximum Allowable Concentrations		TACO Remediation Objectives	
		Most Stringent	Within an MSA	Construction Worker Exposure	Groundwater Protection (TCLP/SPLP)
<b>ISGS #1314V3-66 (Scottish Rite Masonic Center)</b>					
<b>Inorganics (mg/Kg)</b>					
Iron	15,000	15,000	15,900	--	--
Lead	15.0	107	--	700	--
Magnesium	9,600	325,000	--	730,000	--
Manganese	<b>670</b>	630	636	4,100	--
Mercury	0.028	0.89	--	0.1	--
Nickel	18.0	100	--	4,100	--
Potassium	840	--	--	--	--
Selenium	0.47	1.3	--	1,000	--
Sodium	430	--	--	--	--
Thallium	1.5	2.6	--	160	--
Vanadium	23.0	550	--	1,400	--
Zinc	40.0	5,100	--	61,000	--
<b>TCLP Metals (mg/L)</b>					
Barium	0.65	--	--	--	2.0
Boron	0.087	--	--	--	2.0
Lead	<b>0.008</b>	--	--	--	0.0075
Manganese	<b>0.27</b>	--	--	--	0.15
Selenium	0.021	--	--	--	0.05
<b>SPLP Metals (mg/L)</b>					
Lead	<b>0.073</b>	--	--	--	0.0075
Manganese	<b>0.58</b>	--	--	--	0.15
<b>ISGS #1314V3-67 (Vacant Land)</b>					
<b>SVOCs (mg/Kg)</b>					
Anthracene	0.0069	12,000	--	610,000	--
Benzo(a)anthracene	0.043	0.9	1.8	170	--
Benzo(a)pyrene	0.052	0.09	2.1	17	--
Benzo(b)fluoranthene	0.068	0.9	2.1	170	--
Benzo(g,h,i)perylene	0.022	--	--	--	--
Benzo(k)fluoranthene	0.025	9.0	--	1,700	--
Bis(2-ethylhexyl) phthalate	0.12	46	--	4,100	--
Chrysene	0.045	88	--	17,000	--
Dibenz(a,h)anthracene	0.0077	0.09	0.42	17	--
Fluoranthene	0.082	3,100	--	82,000	--
Indeno(1,2,3-cd)pyrene	0.032	0.9	1.6	170	--
Phenanthrene	0.035	--	--	--	--
Pyrene	0.075	2,300	--	61,000	--
<b>Inorganics (mg/Kg)</b>					
Antimony	0.33	5.0	--	82	--
Arsenic	6.6	11.3	13	61	--
Barium	120	1,500	--	14,000	--
Beryllium	0.53	22	--	410	--
Boron	4.2	40	--	41,000	--
Cadmium	0.3	5.2	--	200	--
Calcium	42,000	--	--	--	--

Maximum detected concentrations above the most stringent Maximum Allowable Concentration are shaded. See note at end of table.

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**Table 4-2 Detected Soil Analytes and Comparison with Applicable Criteria  
FAI 74 (Interstate 74), Contract No. 64E26  
Moline, Rock Island County, Illinois**

Chemical	Maximum Detected Concentration	Maximum Allowable Concentrations		TACO Remediation Objectives	
		Most Stringent	Within an MSA	Construction Worker Exposure	Groundwater Protection (TCLP/SPLP)
<b>ISGS #1314V3-67 (Vacant Land)</b>					
<b>Inorganics (mg/Kg)</b>					
Chromium	12.0	21	--	690	--
Cobalt	7.	20	--	12,000	--
Copper	13.0	2,900	--	8,200	--
Iron	15,000	15,000	15,900	--	--
Lead	50.0	107	--	700	--
Magnesium	17,000	325,000	--	730,000	--
Manganese	<b>960</b>	630	636	4,100	--
Mercury	0.047	0.89	--	0.1	--
Nickel	19.0	100	--	4,100	--
Potassium	1,300	--	--	--	--
Selenium	0.5	1.3	--	1,000	--
Sodium	860	--	--	--	--
Thallium	1.6	2.6	--	160	--
Vanadium	24.0	550	--	1,400	--
Zinc	69.0	5,100	--	61,000	--
<b>TCLP Metals (mg/L)</b>					
Barium	0.91	--	--	--	2.0
Boron	0.18	--	--	--	2.0
Cadmium	0.004	--	--	--	0.005
Iron	0.44	--	--	--	5.0
Lead	<b>0.033</b>	--	--	--	0.0075
Manganese	<b>2.3</b>	--	--	--	0.15
Nickel	0.028	--	--	--	0.1
Zinc	0.42	--	--	--	5.0
<b>SPLP Metals (mg/L)</b>					
Lead	<b>0.25</b>	--	--	--	0.0075
Manganese	<b>1.</b>	--	--	--	0.15
<b>ISGS #1314V3-74 (Residence)</b>					
<b>SVOCs (mg/Kg)</b>					
Benzo(a)anthracene	0.025	0.9	1.8	170	--
Benzo(a)pyrene	0.031	0.09	2.1	17	--
Benzo(b)fluoranthene	0.046	0.9	2.1	170	--
Benzo(g,h,i)perylene	0.024	--	--	--	--
Benzo(k)fluoranthene	0.017	9.0	--	1,700	--
Chrysene	0.03	88	--	17,000	--
Dibenz(a,h)anthracene	0.01	0.09	0.42	17	--
Fluoranthene	0.05	3,100	--	82,000	--
Indeno(1,2,3-cd)pyrene	0.019	0.9	1.6	170	--
Phenanthrene	0.023	--	--	--	--
Pyrene	0.048	2,300	--	61,000	--
<b>Inorganics (mg/Kg)</b>					
Antimony	0.73	5.0	--	82	--
Arsenic	3.7	11.3	13	61	--
Barium	43.0	1,500	--	14,000	--

Maximum detected concentrations above the most stringent Maximum Allowable Concentration are shaded. See note at end of table.

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**Table 4-2 Detected Soil Analytes and Comparison with Applicable Criteria  
FAI 74 (Interstate 74), Contract No. 64E26  
Moline, Rock Island County, Illinois**

Chemical	Maximum Detected Concentration	Maximum Allowable Concentrations		TACO Remediation Objectives	
		Most Stringent	Within an MSA	Construction Worker Exposure	Groundwater Protection (TCLP/SPLP)
<b>ISGS #1314V3-74 (Residence)</b>					
<b>Inorganics (mg/Kg)</b>					
Beryllium	0.45	22	--	410	--
Boron	5.	40	--	41,000	--
Cadmium	0.24	5.2	--	200	--
Calcium	48,000	--	--	--	--
Chromium	10.0	21	--	690	--
Cobalt	5.6	20	--	12,000	--
Copper	12.0	2,900	--	8,200	--
Iron	13,000	15,000	15,900	--	--
Lead	9.	107	--	700	--
Magnesium	24,000	325,000	--	730,000	--
Manganese	330	630	636	4,100	--
Mercury	0.022	0.89	--	0.1	--
Nickel	13.0	100	--	4,100	--
Potassium	1,400	--	--	--	--
Selenium	0.31	1.3	--	1,000	--
Sodium	640	--	--	--	--
Thallium	0.98	2.6	--	160	--
Vanadium	16.0	550	--	1,400	--
Zinc	34.0	5,100	--	61,000	--
<b>TCLP Metals (mg/L)</b>					
Barium	0.58	--	--	--	2.0
Cadmium	0.0025	--	--	--	0.005
Manganese	<b>0.95</b>	--	--	--	0.15
<b>SPLP Metals (mg/L)</b>					
Manganese	<b>1.1</b>	--	--	--	0.15
<b>ISGS #1314V3-75 (Residence)</b>					
<b>SVOCs (mg/Kg)</b>					
Benzo(a)anthracene	0.033	0.9	1.8	170	--
Benzo(a)pyrene	0.041	0.09	2.1	17	--
Benzo(b)fluoranthene	0.055	0.9	2.1	170	--
Benzo(g,h,i)perylene	0.019	--	--	--	--
Benzo(k)fluoranthene	0.02	9.0	--	1,700	--
Chrysene	0.035	88	--	17,000	--
Dibenz(a,h)anthracene	0.012	0.09	0.42	17	--
Fluoranthene	0.053	3,100	--	82,000	--
Indeno(1,2,3-cd)pyrene	0.024	0.9	1.6	170	--
Phenanthrene	0.033	--	--	--	--
Pyrene	0.05	2,300	--	61,000	--
<b>Inorganics (mg/Kg)</b>					
Antimony	0.69	5.0	--	82	--
Arsenic	5.9	11.3	13	61	--
Barium	97.0	1,500	--	14,000	--
Beryllium	0.71	22	--	410	--
Boron	6.9	40	--	41,000	--

Maximum detected concentrations above the most stringent Maximum Allowable Concentration are shaded. See note at end of table.

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**Table 4-2 Detected Soil Analytes and Comparison with Applicable Criteria  
FAI 74 (Interstate 74), Contract No. 64E26  
Moline, Rock Island County, Illinois**

Chemical	Maximum Detected Concentration	Maximum Allowable Concentrations		TACO Remediation Objectives	
		Most Stringent	Within an MSA	Construction Worker Exposure	Groundwater Protection (TCLP/SPLP)
<b>ISGS #1314V3-75 (Residence)</b>					
<b>Inorganics (mg/Kg)</b>					
Cadmium	0.5	5.2	--	200	--
Calcium	23,000	--	--	--	--
Chromium	13.0	21	--	690	--
Cobalt	6.	20	--	12,000	--
Copper	16.0	2,900	--	8,200	--
Iron	<b>17,000</b>	15,000	15,900	--	--
Lead	81.0	107	--	700	--
Magnesium	10,000	325,000	--	730,000	--
Manganese	440	630	636	4,100	--
Mercury	0.079	0.89	--	0.1	--
Nickel	15.0	100	--	4,100	--
Potassium	930	--	--	--	--
Selenium	0.46	1.3	--	1,000	--
Silver	0.1	4.4	--	1,000	--
Sodium	970	--	--	--	--
Thallium	1.4	2.6	--	160	--
Vanadium	27.0	550	--	1,400	--
Zinc	89.0	5,100	--	61,000	--
<b>TCLP Metals (mg/L)</b>					
Barium	1.1	--	--	--	2.0
Cadmium	0.0042	--	--	--	0.005
Lead	<b>0.016</b>	--	--	--	0.0075
Manganese	<b>0.49</b>	--	--	--	0.15
Zinc	0.1	--	--	--	5.0
<b>SPLP Metals (mg/L)</b>					
Lead	<b>0.3</b>	--	--	--	0.0075
Manganese	<b>0.8</b>	--	--	--	0.15

NOTE: Maximum Allowable Concentration refers to the values listed in the Summary of Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations, 35 Ill. Adm. Code 1100.Subpart F dated 8/27/12. Total COC concentrations exceeding a MAC are highlighted; however, further evaluation is required to determine if the detected metals concentrations exceed the applicable MAC. For metals, total, TCLP and SPLP results are evaluated collectively to determine compliance with MACs.

**Key:**

ISGS = Illinois State Geological Survey  
 MAC = Maximum Allowable Concentration of Chemical Constituents in Uncontaminated Soil  
 mg/L = Milligrams per liter.  
 mg/kg = Milligrams per kilogram.  
 MSA = Metropolitan Statistical Area.

-- = Not applicable or not specified.  
 SPLP = Synthetic precipitation leaching procedure.  
 SVOCs = Semivolatile organic compounds.  
 TACO = Tiered Approach to Corrective Action Objective  
 TCLP = Toxicity characteristic leaching procedure.  
 VOCs = Volatile organic compounds.

**Table 4-3 Summary of Soil Impacts  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

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Boring ID	Range of Headspace Readings (meter units)	Sample	pH	Contaminants of Concern <sup>a</sup>		Off-Site Management <sup>b</sup>	
				Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only	Eligible for CCDD or Uncontaminated Soil Fill Operation?	Classification
<b>ISGS #1314V3-1 (IDOT ROW)</b>							
1314V3-01-B12	None Detected	1314V3-01-B12 (0-6)	8.8	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
		1314V3-01-B12 (6-11)	8.1	None	None		
1314V3-01-B13	None Detected	1314V3-01-B13 (0-5)	<b>9.1</b>	None	<b>Manganese (T/S)</b>	No (pH)	Non-special Waste
1314V3-01-B14	None Detected	1314V3-01-B14 (0-6)	8.2	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
		1314V3-01-B14 (6-12)	7.8	None	<b>Iron (T/S) and Manganese (T/S)</b>		
1314V3-01-B15	None Detected	1314V3-01-B15 (0-7)	8.3	None	None	Yes	Uncontaminated soil
		1314V3-01-B15 (7-13)	8.4	None	<b>Manganese (T/S)</b>		
1314V3-01-B16	None Detected	1314V3-01-B16 (0-6)	7.8	None	None	Yes	Unrestricted
1314V3-01-B17	None Detected	1314V3-01-B17 (0-7)	7.5	None	None	Yes	Unrestricted
1314V3-01-B18	None Detected	1314V3-01-B18 (0-7)	8.2	None	None	Yes	Unrestricted
1314V3-01-B19	None Detected	1314V3-01-B19 (0-5)	8.5	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
1314V3-01-B20	None Detected	1314V3-01-B20 (0-6)	8.7	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
1314V3-01-B21	None Detected	1314V3-01-B21 (0-6)	8.3	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
1314V3-01-B22	None Detected	1314V3-01-B22 (0-7)	8.2	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
1314V3-01-B23	None Detected	1314V3-01-B23 (0-8)	7.9	None	None	Yes	Unrestricted
1314V3-01-B24	None Detected	1314V3-01-B24 (0-4.5)	7.8	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
1314V3-01-B25	None Detected	1314V3-01-B25 (0-8.2)	7.8	None	None	Yes	Unrestricted
1314V3-01-B26	None Detected	1314V3-01-B26 (0-2)	8.4	None	<b>Benzo(a)pyrene and manganese (T/S)</b>	Yes (within MSA, including Chicago)	Uncontaminated soil



**Table 4-3 Summary of Soil Impacts  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID	Range of Headspace Readings (meter units)	Sample	pH	Contaminants of Concern <sup>a</sup>		Off-Site Management <sup>b</sup>	
				Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only	Eligible for CCDD or Uncontaminated Soil Fill Operation?	Classification
1314V3-01-B27	0.0 - 0.2	1314V3-01-B27 (0-8)	9.1	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and lead <sup>c,d</sup>	Manganese (T/S)	No	Non-special Waste
		1314V3-01-B27 (8-15)	8.9	Benzo(a)anthracene <sup>c</sup> , benzo(a)pyrene <sup>c</sup> , benzo(b)fluoranthene <sup>c</sup> , carbazole, dibenzo(a,h)anthracene <sup>c</sup> , indeno(1,2,3-cd)pyrene <sup>c</sup> , and naphthalene <sup>d</sup>	Manganese (T/S)		
		1314V3-01-B27 (15-22)	8.8	None	Lead (T/S) and manganese (T/S)		
1314V3-01-B28	None Detected	1314V3-01-B28 (0-4.5)	9.4	None	Manganese (T/S)	No (pH)	Non-special Waste
1314V3-01-B29	None Detected	1314V3-01-B29 (0-5)	9.4	None	Manganese (T/S)	No (pH)	Non-special Waste
1314V3-01-B30	None Detected	1314V3-01-B30 (0-6)	9.7	None	Manganese (T/S)	No (pH)	Non-special Waste
1314V3-01-B31	None Detected	1314V3-01-B31 (0-6)	8.5	None	Manganese (T/S)	Yes	Uncontaminated soil
1314V3-01-B32	None Detected	1314V3-01-B32 (0-6)	8.2	Manganese	None	No	Non-special Waste
1314V3-01-B33	None Detected	1314V3-01-B33 (0-2.5)	9.1	None	Benzo(a)pyrene	No (pH)	Non-special Waste
1314V3-01-B34	None Detected	1314V3-01-B34 (0-7)	8.6	None	Manganese (T/S)	Yes	Uncontaminated soil
		1314V3-01-B34 (7-14)	8.6	None	Manganese (T/S)		
		1314V3-01-B34 (14-20)	8.6	None	Manganese (T/S)		
1314V3-01-B35	None Detected	1314V3-01-B35 (0-7)	8.6	None	Lead (T/S) and manganese (T/S)	Yes	Uncontaminated soil
		1314V3-01-B35 (0-7)D	8.5	None	Manganese (T/S)		
		1314V3-01-B35 (7-14)	8.2	None	Manganese (T/S)		
		1314V3-01-B35 (14-20)	8.6	None	Manganese (T/S)		

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**Table 4-3 Summary of Soil Impacts  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

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Boring ID	Range of Headspace Readings (meter units)	Sample	pH	Contaminants of Concern <sup>a</sup>		Off-Site Management <sup>b</sup>	
				Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only	Eligible for CCDD or Uncontaminated Soil Fill Operation?	Classification
1314V3-01-B36	None Detected	1314V3-01-B36 (0-8)	8.4	None	Manganese (T/S)	Yes	Uncontaminated soil
		1314V3-01-B36 (8-16)	8.3	None	Lead (T/S) and manganese (T/S)		
		1314V3-01-B36 (16-24)	8.5	None	Manganese (T/S)		
		1314V3-01-B36 (24-28)	8.2	None	None		
1314V3-01-B37	None Detected	1314V3-01-B37 (0-2)	9.2	None	Manganese (T/S)	No (pH)	Non-special Waste
1314V3-01-B38	None Detected	1314V3-01-B38 (0-4)	8.7	None	Manganese (T/S)	Yes	Uncontaminated soil
1314V3-01-B39	None Detected	1314V3-01-B39 (0-4)	8.2	None	None	Yes	Unrestricted
1314V3-01-B40	None Detected	1314V3-01-B40 (0-2)	8.8	None	Manganese (T/S)	Yes	Uncontaminated soil
1314V3-01-B41	None Detected	1314V3-01-B41 (0-2)	8.7	None	Manganese (T/S)	Yes	Uncontaminated soil
1314V3-01-B42	None Detected	1314V3-01-B42 (0-2)	9.1	Lead	None	No	Non-special Waste
1314V3-01-B43	None Detected	1314V3-01-B43 (0-2)	8.8	None	Lead (T/S) and manganese (T/S)	Yes	Uncontaminated soil
<b>ISGS #1314V3-66 (Scottish Rite Masonic Center)</b>							
1314V3-66-B01	None Detected	1314V3-66-B01 (0-7)	8.6	None	Manganese (T/S)	Yes	Uncontaminated soil
		1314V3-66-B01 (0-7) D	8.8	None	Lead (T/S)		
1314V3-66-B02	None Detected	1314V3-66-B02 (0-6)	8.2	None	None	Yes	Unrestricted
<b>ISGS #1314V3-67 (Vacant Land)</b>							
1314V3-67-B01	None Detected	1314V3-67-B01 (0-5)	8.3	None	Lead (T/S) and manganese (T/S)	Yes	Uncontaminated soil
		1314V3-67-B01 (5-9)	8.2	None	Lead (T/S) and manganese (T/S)		
1314V3-67-B02	None Detected	1314V3-67-B02 (0-6)	8.2	None	None	Yes	Unrestricted
1314V3-67-B03	None Detected	1314V3-67-B03 (0-4)	8.9	None	Manganese (T/S)	Yes	Uncontaminated soil
1314V3-67-B04	None Detected	1314V3-67-B04 (0-7)	7.9	None	Manganese (T/S)	Yes	Uncontaminated soil
		1314V3-67-B04 (7-13)	8.1	None	Lead (T/S) and manganese (T/S)		
1314V3-67-B05	None Detected	1314V3-67-B05 (0-6)	9.0	None	Manganese (T/S)	Yes	Uncontaminated soil
1314V3-67-B06	None Detected	1314V3-67-B06 (0-4)	8.7	None	Manganese (T/S)	Yes	Uncontaminated soil

**Table 4-3 Summary of Soil Impacts  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID	Range of Headspace Readings (meter units)	Sample	pH	Contaminants of Concern <sup>a</sup>		Off-Site Management <sup>b</sup>	
				Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only	Eligible for CCDD or Uncontaminated Soil Fill Operation?	Classification
1314V3-67-B07	None Detected	1314V3-67-B07 (0-4)	8.3	None	None	Yes	Unrestricted
1314V3-67-B08	None Detected	1314V3-67-B08 (0-4)	8.2	None	None	Yes	Unrestricted
<b>ISGS #1314V3-74 (Residence)</b>							
1314V3-74-B01	None Detected	1314V3-74-B01 (0-2)	9.0	None	<b>Manganese (T/S)</b>	Yes	Uncontaminated soil
<b>ISGS #1314V3-75 (Residence)</b>							
1314V3-75-B01	None Detected	1314V3-75-B01 (0-2)	<b>9.1</b>	None	<b>Lead (T/S) and manganese (T/S)</b>	No (pH)	Non-special Waste

Notes:

<sup>a</sup> Contaminants of concern are defined as analytes that were detected at a concentration above one or more reference criteria. The following compounds and analytes have MACs for both MSAs and non-MSAs: arsenic, iron, manganese, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. TCLP/SPLP exceedances of the SCGIER are considered to be MAC exceedances when the total metal concentration also exceeds the MAC.

<sup>b</sup> Soils that contain constituent concentrations below the most stringent MACs may be managed off site as "uncontaminated soil" pursuant to 35 IAC 1100. Uncontaminated soil with a pH range of 6.25 to 9.0 and no PID readings above background levels may be managed off site to a Clean Construction and Demolition Debris (CCDD) facility or uncontaminated soil fill operation (USFO). When a constituent has a MAC based on a Metropolitan Statistical Area (MSA), soils that contain constituents below the applicable MACs for an MSA, exhibit a pH within the range of 6.25 to 9.0, and do not exhibit PID readings above background levels may be managed off site as "uncontaminated soil" to a CCDD or USFO within the MSA county, excluding Chicago. Soils containing constituents above MACs for an MSA that cannot be managed on site are estimated as non-special waste. Metals (excluding arsenic) are considered eligible for off-site management to a CCDD or USFO facility unless the detected total, TCLP, and SPLP concentrations exceed applicable comparison criteria.

<sup>c</sup> The analyte concentration exceeds the TACO Tier 1 remediation objective for the residential soil exposure route.

<sup>d</sup> The detected analyte concentration exceeds the TACO Tier 1 remediation objective for the construction worker exposure route.

Key:

ISGS = Illinois State Geological Survey.

MAC = Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill at Regulated Fill

MSA = Metropolitan Statistical Area.

SPLP = Synthetic precipitation leaching procedure.

TCLP = Toxicity characteristic leaching procedure.

T/S = Toxicity characteristic leaching procedure/Synthetic precipitation leaching procedure.

TVOCs = Total volatile organic compounds.

**Table 4-4 Estimate of Impacted Soil Within IDOT Construction Areas  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID <sup>a</sup>	Impacted Stationing	Contaminants of Concern		Construction Feature Involving Excavation of Impacted Soil	Excavation Dimension Assumption <sup>b</sup>	Estimated Volume of Impacted Soil <sup>b</sup> (cubic yards)		
		Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only			Eligible for CCDD or USFO	Ineligible for CCDD or USFO	Non-Special Waste
<b>ISGS #1314V3-1 (IDOT ROW)</b>								
1314V3-01-B12	Station 277+30 to Station 278+40 (I-74 WB), 0 to 145' LT	None	Manganese (T/S)	Ramp construction, ditch work, road reconstruction, curb and gutter and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	1,338.2	--	--
1314V3-01-B13	Station 278+40 to Station 279+00 (I-74 WB), 0 to 145' LT	pH	Manganese (T/S)	Ramp construction, retaining wall and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	209.2
1314V3-01-B14	Station 279+00 to Station 280+50 (I-74 WB), 0 to 145' LT	None	Iron (T/S) and Manganese (T/S)	Ramp construction, retention wall and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	553.4	--	--
1314V3-01-B15	Station 280+50 to Station 282+00 (I-74 WB), 0 to 145' LT	None	Manganese (T/S)	Ramp reconstruction, retaining wall, and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	890.0	--	--
1314V3-01-B19	Station 287+30 to Station 289+25 (I-74 WB), 25' to 140'	None	Manganese (T/S)	Ramp reconstruction, retaining wall, and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	861.2	--	--

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**Table 4-4 Estimate of Impacted Soil Within IDOT Construction Areas  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID <sup>a</sup>	Impacted Stationing	Contaminants of Concern		Construction Feature Involving Excavation of Impacted Soil	Excavation Dimension Assumption <sup>b</sup>	Estimated Volume of Impacted Soil <sup>b</sup> (cubic yards)		
		Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only			Eligible for CCDD or USFO	Ineligible for CCDD or USFO	Non-Special Waste
1314V3-01-B20	Station 50+05 to Station 52+25 (19th Street), 0 to 100' RT and 0 to 100' LT	None	Manganese (T/S)	Ramp reconstruction, retaining wall, and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	2,871.6	--	--
1314V3-01-B21	Station 291+40 to Station 293+60 (I-74 WB), 20' to 130' LT	None	Manganese (T/S)	Ramp reconstruction, retaining wall, and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	1,198.3	--	--
1314V3-01-B22	Station 277+30 to Station 280+15, (I-74 EB), 0 to 125' RT	None	Manganese (T/S)	Ramp reconstruction and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	401.9	--	--
1314V3-01-B24	Station 281+50 to Station 282+95 (I-74 EB), 0 to 130' RT	None	Manganese (T/S)	Ramp reconstruction and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	1,883.7	--	--
1314V3-01-B26	Station 284+40 to Station 286+00 (I-74 EB), 0 to 120' RT	None	Benzo(a)pyrene and manganese (T/S)	Ramp reconstruction, retaining wall and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	2,508.8	--	--

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**Table 4-4 Estimate of Impacted Soil Within IDOT Construction Areas  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID <sup>a</sup>	Impacted Stationing	Contaminants of Concern		Construction Feature Involving Excavation of Impacted Soil	Excavation Dimension Assumption <sup>b</sup>	Estimated Volume of Impacted Soil <sup>b</sup> (cubic yards)		
		Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only			Eligible for CCDD or USFO	Ineligible for CCDD or USFO	Non-Special Waste
1314V3-01-B27	Station 286+00 to Station 287+30 (I-74 EB), 0 to 120' RT	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, lead, pH, VOCs	Lead (T/S) and manganese (T/S)	Ramp reconstruction, retaining wall, and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	3,070.80
1314V3-01-B28	Station 48+50 to Station 50+05 (19th Street), 0 to 75' RT and 0 to 125' LT	pH	Manganese (T/S)	Ramp reconstruction and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	3,773.0
1314V3-01-B29	Station 289+80 to Station 291+40 (I-74 EB), 0 to 85' RT	pH	Manganese (T/S)	Ramp reconstruction and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	192.70
1314V3-01-B30	Station 291+40 to Station 292+85 (I-74 EB), 0 to 90' RT and 0 to 30' LT	pH	Manganese (T/S)	Ramp reconstruction and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	405.0
1314V3-01-B31	Station 292+85 to Station 293+95 (I-74 EB) 0 to 130' RT and 0 to 30' LT	None	Manganese (T/S)	Ramp reconstruction and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	953.8	--	--

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**Table 4-4 Estimate of Impacted Soil Within IDOT Construction Areas  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID <sup>a</sup>	Impacted Stationing	Contaminants of Concern		Construction Feature Involving Excavation of Impacted Soil	Excavation Dimension Assumption <sup>b</sup>	Estimated Volume of Impacted Soil <sup>b</sup> (cubic yards)		
		Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only			Eligible for CCDD or USFO	Ineligible for CCDD or USFO	Non-Special Waste
1314V3-01-B32	Station 42+00 to Station 43+35 (19th Street), 0 to 75' RT and 0 to 35' LT	Manganese	None	Ramp reconstruction, ditch work and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	151.8
1314V3-01-B33	Station 43+35 to Station 45+05 (19th Street), 0 to 75' RT and 0 to 35' RT	pH	Benzo(a)pyrene	Ramp reconstruction and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	138.10
1314V3-01-B34	Station 45+05 to Station 47+65 (19th Street), 0 to 100' RT and 0 to 60' LT	None	Manganese (T/S)	Ramp reconstruction, ditch work and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	203.8	--	--
1314V3-01-B35	Station 87+30 to Station 89+40 (Ramp 7th-B), 0 to 85' RT and 0 to 50' LT	None	Lead (T/S) and manganese (T/S)	Ramp reconstruction, ditch work and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	396.2	--	--
1314V3-01-B36	Station 89+40 to Station 92+90 (Ramp 7th-B), 0 to 45' RT and 0 to 75' LT	None	Lead (T/S) and manganese (T/S)	Ramp reconstruction, ditch work and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	867.9	--	--

4-28

**Table 4-4 Estimate of Impacted Soil Within IDOT Construction Areas  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID <sup>a</sup>	Impacted Stationing	Contaminants of Concern		Construction Feature Involving Excavation of Impacted Soil	Excavation Dimension Assumption <sup>b</sup>	Estimated Volume of Impacted Soil <sup>b</sup> (cubic yards)		
		Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only			Eligible for CCDD or USFO	Ineligible for CCDD or USFO	Non-Special Waste
1314V3-01-B37	Station 55+50 to Station 56+50 (19th Street), 0 to 45' LT	pH	Manganese (T/S)	Road reconstruction	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	27.60
1314V3-01-B38	Station 311+00 to Station 312+75 (I-74 EB), 0 to 125' RT	None	Manganese (T/S)	Road reconstruction	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	1,057.4	--	--
1314V3-01-B40	Station 1960+85 to Station 1962+60 (Coaltown Road), 0 to 35' RT and 0 to 35' LT	None	Manganese (T/S)	Road reconstruction, curb and gutter	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	305.5	--	--
1314V3-01-B41	Station 1962+60 to Station 1964+70 (Coaltown Road), 0 to 35' RT and 0 to 35' LT	None	Manganese (T/S)	Road reconstruction, curb and gutter	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	334.6	--	--
1314V3-01-B42	Station 1964+70 to Station 1966+65 (Coaltown Road), 0 to 35' RT and 0 to 35' LT	Lead and pH	None	Road reconstruction, curb and gutter	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	--	--	319.4

4-29



**Table 4-4 Estimate of Impacted Soil Within IDOT Construction Areas  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID <sup>a</sup>	Impacted Stationing	Contaminants of Concern		Construction Feature Involving Excavation of Impacted Soil	Excavation Dimension Assumption <sup>b</sup>	Estimated Volume of Impacted Soil <sup>b</sup> (cubic yards)		
		Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only			Eligible for CCDD or USFO	Ineligible for CCDD or USFO	Non-Special Waste
1314V3-01-B43	Station 1966+65 to Station 1968+20 (Coaltown Road), 0 to 35' RT and 0 to 35' LT	None	Lead (T/S) and manganese (T/S)	Road reconstruction, curb and gutter	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	381.0	--	--
<b>Total Volume of Impacted Soil in Construction Zone:</b>						<b>17,007.0</b>	<b>0.0</b>	<b>8,288.0</b>
<b>ISGS #1314V3-66 (Scottish Rite Masonic Center)</b>								
1314V3-66-B01	Station 39+05 to Station 40+35 (19th Street), 0 to 95' RT and 0 to 15' LT	None	Lead (T/S) and manganese (T/S)	Road reconstruction, curb, gutter and sidewalk replacement, storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	873.8	--	--
<b>Total Volume of Impacted Soil in Construction Zone:</b>						<b>874.0</b>	<b>0.0</b>	<b>0.0</b>
<b>ISGS #1314V3-67 (Vacant Land)</b>								
1314V3-67-B01	Station 77+50 to Station 79+10 (Ramp 7th-B), 0 to 75' RT	None	Lead (T/S) and manganese (T/S)	Road reconstruction, ramp reconstruction, curb, gutter and sidewalk replacement, and storm sewer	Grading quantity estimated from IDOT excavation summary tables and cross sections. Storm sewers, anchor slabs, and piers estimated from dimensions measured from IDOT-provided profiles, cross sections, and plan sheets.	44.3	--	--
1314V3-67-B03	Station 80+25 to Station 81+60 (Ramp 7th-B), 0 to 60' RT	None	Manganese (T/S)	Road reconstruction and ditchwork	Quantity estimated from IDOT excavation summary tables, cross sections	740.6	--	--
1314V3-67-B04	Station 81+60 to Station 82+95 (Ramp 7th-B), 0 to 55' RT	None	Lead (T/S) and manganese (T/S)	Road reconstruction, curb, gutter and sidewalk replacement	Quantity estimated from IDOT excavation summary tables, cross sections	1,274.5	--	--

4-30

**Table 4-4 Estimate of Impacted Soil Within IDOT Construction Areas  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Boring ID <sup>a</sup>	Impacted Stationing	Contaminants of Concern		Construction Feature Involving Excavation of Impacted Soil	Excavation Dimension Assumption <sup>b</sup>	Estimated Volume of Impacted Soil <sup>b</sup> (cubic yards)		
		Above All Applicable Comparison Criteria	Above Most Stringent MAC, Chicago MAC, or SCGIER Criteria Only			Eligible for CCDD or USFO	Ineligible for CCDD or USFO	Non-Special Waste
1314V3-67-B05	Station 82+95 to Station 84 +70 (Ramp 7th-B), 0 to 90' RT	None	Manganese (T/S)	Ramp reconstruction and ditchwork	Quantity estimated from IDOT excavation summary tables, cross sections	1,547.6	--	--
1314V3-67-B06	Station 42+05 to Station 43+40 (19th Street), 35' to 100' LT	None	Manganese (T/S)	Road reconstruction, curb and gutter	Quantity estimated from IDOT excavation summary tables, cross sections	287.8	--	--
<b>Total Volume of Impacted Soil in Construction Zone:</b>						<b>3,895.0</b>	<b>0.0</b>	<b>0.0</b>
<b>ISGS #1314V3-74 (Residence)</b>								
1314V3-74-B01	Station 54+40 to Station 55+50 (19th Street), 0 to 70' LT	None	Manganese (T/S)	Road reconstruction, curb, gutter	Quantity provided by IDOT	198.9	--	--
<b>Total Volume of Impacted Soil in Construction Zone:</b>						<b>199.0</b>		<b>0.0</b>
<b>ISGS #1314V3-75 (Residence)</b>								
1314V3-75-B01	Station 1100+75 to Station 1101+45 (11th Street), 0 to 30' RT	pH	Lead (T/S) and manganese (T/S)	Road reconstruction, curb, gutter	Quantity provided by IDOT	--	--	200.0
<b>Total Volume of Impacted Soil in Construction Zone:</b>						<b>0.0</b>	<b>0.0</b>	<b>200.0</b>

Notes:

<sup>a</sup> Borings shown for each site include borings from adjacent sites where COCs from the adjacent sites are assumed to extend to the proposed construction area on the site.

<sup>b</sup> Estimated excavation volumes are based on quantities provided by IDOT. Impacted soil volumes for each boring were estimated by dividing the total proposed excavation volume proportionally among impacted borings on or adjacent to the site. The lateral extent of impacted soil at a boring was assumed to extend one-half the distance between the impacted boring and any adjacent boring(s). When site construction includes light pole foundations, the estimated quantities for road reconstruction, curb, gutter and sidewalk replacement are calculated by first subtracting the estimated quantity of impacted soil for the light pole foundation, then calculating a proportion of the soil associated with the appropriate borings.

<sup>c</sup> Estimated impacts are included for a boring advanced at an adjacent site, based on the assumed aggregate impact areas (See Section 4 for a discussion of the aggregate impact assumptions).

Key:

COCs = Contaminants of concern.

ISGS = Illinois State Geological Survey.

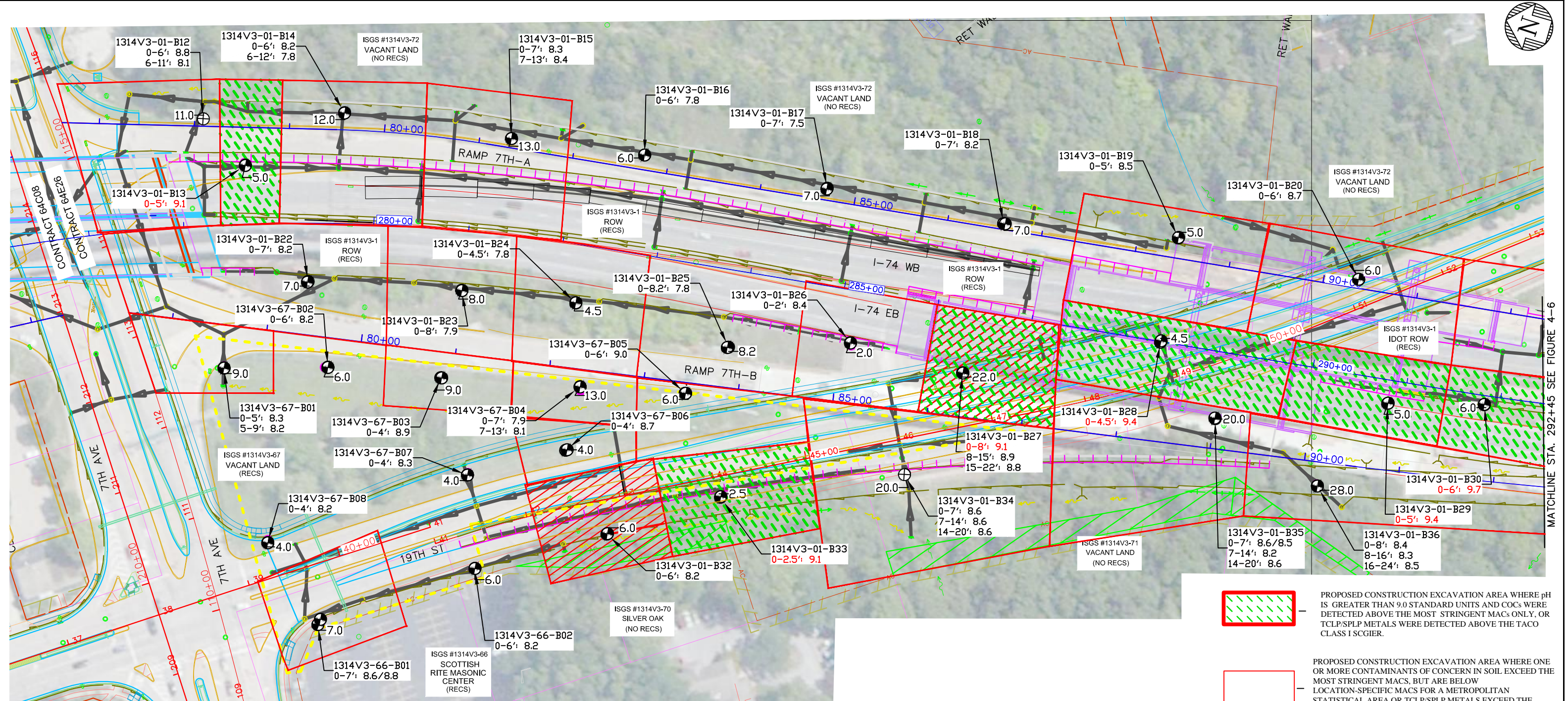
MACs = Maximum allowable concentration of chemical constituents in uncontaminated soil used as fill material at regulated fill operations.

T/S = Toxicity characteristic leaching procedure/synthetic precipitation leaching procedure.

MSA = Metropolitan Statistical Area.

VOC = Volatile organic compound.

TVOCs = Total volatile organic compounds.



**LEGEND**

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- EXISTING MANHOLE
- PROPOSED MANHOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- PROPOSED CULVERT
- PROPOSED BRIDGE STRUCTURE
- PROPERTY TAKE
- PROPOSED UNDERDRAIN
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED BORING LOCATION (DEPTH IN FEET)
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- EXISTING CENTERLINES
- EXISTING CENTERLINES
- EXISTING ROW
- PROPOSED ROW
- APPROXIMATE PESA SITE BOUNDARY
- MAGNETOMETER SURVEY
- PROPOSED DITCH
- PROPOSED ANCHOR SLAB
- TEMPORARY MONITORING WELL (DEPTH IN FEET)

- PROPOSED CONSTRUCTION EXCAVATION AREA WHERE pH IS GREATER THAN 9.0 STANDARD UNITS AND COCs WERE DETECTED ABOVE THE MOST STRINGENT MACS ONLY, OR TCLP/SPLP METALS WERE DETECTED ABOVE THE TACO CLASS I SCGIER.
  - PROPOSED CONSTRUCTION EXCAVATION AREA WHERE ONE OR MORE CONTAMINANTS OF CONCERN IN SOIL EXCEED THE MOST STRINGENT MACS, BUT ARE BELOW LOCATION-SPECIFIC MACS FOR A METROPOLITAN STATISTICAL AREA OR TCLP/SPLP METALS EXCEED THE TACO CLASS I RO FOR THE SCGIER, BUT THE TOTAL METAL CONCENTRATION IS BELOW THE MAC.
  - PROPOSED CONSTRUCTION EXCAVATION AREA WHERE ONE OR MORE CONTAMINANTS OF CONCERN WERE DETECTED ABOVE APPLICABLE REFERENCE CONCENTRATIONS
- SCALE IN FEET
- 0      100      200      300

NOTE: SEE FIGURES 2-2 THROUGH 2-5 FOR CONTAMINANTS OF CONCERN

CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUGHES	CHECKED BY: J. JENKINS	 Global Environmental Specialists	<b>INVESTIGATION DATA SUMMARY</b> FAI 74 - INTERSTATE 74 (CONTRACT # 64E26) STA. 277+80 TO STA. 292+45	PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I 74)	CITY: MOLINE	DATE: 3/10/2017	FIGURE
REVISION 1	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT				IDOT PROJECT # P-93-032-01	WORK ORDER 46	COUNTY: ROCK ISLAND	SCALE: 1" = 100'

**CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-1 (IDOT ROW)										Comparison Criteria						
	1314V3-01-B12		1314V3-01-B13	1314V3-01-B14		1314V3-01-B15		1314V3-01-B16	1314V3-01-B17	1314V3-01-B18		MACs			TACO		
BORING	1314V3-01-B12 (0-6)		1314V3-01-B13 (0-5)	1314V3-01-B14 (0-6)		1314V3-01-B15 (7-13)		1314V3-01-B16 (0-6)	1314V3-01-B17 (0-7)	1314V3-01-B18 (0-7)		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-01-B12 (0-6)		1314V3-01-B13 (0-5)	1314V3-01-B14 (0-6)		1314V3-01-B15 (7-13)		1314V3-01-B16 (0-6)	1314V3-01-B17 (0-7)	1314V3-01-B18 (0-7)							
MATRIX	Soil		Soil	Soil		Soil		Soil	Soil	Soil							
DEPTH (feet)	0-6		0-5	0-6		6-12		0-7	7-13	0-7							
pH	8.8		8.1	9.1 #		8.2		7.8	7.5	8.2							
PID (meter units)	0		0	0		0		0	0	0							
<b>Inorganics (mg/kg)</b>																	
Iron	9,500	13,000	7,400	16,000 †m	12,000	9,300	11,000	12,000	10,000	14,000	15,000	15,900	--	--	--	--	--
Lead	8.2	8.5	6.4	9.4	10	7.6	7.6	7.5	7	8.6	107	--	--	400	700	--	--
Manganese	450	510	180	250	220	270	230	310	270	290	630	636	--	1,600	4,100	--	--
<b>TCLP Metals (mg/L)</b>																	
Iron	ND U	ND U	ND U	2.8	12 L	0.26 J	ND U	0.44	ND U	ND U	--	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	0.0075
Manganese	0.6 L	0.021 J	0.87 L	1.7 L	2.8 L	4 L	1.8 L	3.7 L	4.1 L	3.5 L	--	--	--	--	--	--	0.15
<b>SPLP Metals (mg/L)</b>																	
Iron	NA	NA	NA	NA	69 L	NA	NA	NA	NA	NA	--	--	--	--	--	--	5
Manganese	0.46 L	NA	0.76 L	0.38 L	0.4 L	0.052	0.2 L	0.039	0.057	ND U	--	--	--	--	--	--	0.15

SITE	ISGS #1314V3-1 (IDOT ROW)							Comparison Criteria					
	1314V3-01-B19	1314V3-01-B20	1314V3-01-B22	1314V3-01-B23	1314V3-01-B24	1314V3-01-B25	1314V3-01-B26	MACs			TACO		
BORING	1314V3-01-B19 (0-5)							Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-01-B19 (0-5)												
MATRIX	Soil												
DEPTH (feet)	0-5												
pH	8.5												
PID (meter units)	0												
<b>SVOCs (mg/kg)</b>													
Benzo(a)pyrene	ND U	0.011 J	ND U	ND U	0.02 J	0.0091 J	0.39 †	0.09	2.1	1.3	2.1	17	--
<b>Inorganics (mg/kg)</b>													
Chromium	9.7	13	8.3	11	15	11	26 †	21	--	--	230	690	--
Manganese	350	410	510 J	240	340	370	430	630	636	--	1,600	4,100	--
<b>TCLP Metals (mg/L)</b>													
Chromium	ND U	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Manganese	1 L	0.17 L	0.28 L	1.5 L	0.82 L	5.2 L	0.24 L	--	--	--	--	--	0.15
<b>SPLP Metals (mg/L)</b>													
Manganese	0.21 L	0.44 L	0.94 J L	ND U	0.2 L	0.14	0.64 L	--	--	--	--	--	0.15

**Key to Data Table**

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.

█ = Concentration exceeds applicable comparison criteria.

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

ND = Not detected.

NA = Not analyzed.

PID = Photoionization detector.

J = Estimated value.


U = Analyte was analyzed for but not detected.

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

† = Concentration exceeds the most stringent MAC.

m = Concentration exceeds the MAC for an MSA.

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

CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUGHES	CHECKED BY: J. JENKINS		<b>CONTAMINANTS OF CONCERN</b> FAI 74 - INTERSTATE 74 (CONTRACT # 64E26) SITE 1314V3-1, BORINGS B12 TO B26	PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I-74)	CITY: MOLINE	DATE: 2/23/2017	FIGURE 4-2
REVISION 0	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT			IDOT PROJECT # P-93-032-01	WORK ORDER 46	COUNTY: ROCK ISLAND	SCALE: 1" = 100'	


**CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-1 (IDOT ROW)								Comparison Criteria					
	1314V3-01-B27			1314V3-01-B28	1314V3-01-B29	1314V3-01-B30	1314V3-01-B32		MACs			TACO		
BORING	1314V3-01-B27 (0-8)	1314V3-01-B27 (8-15)	1314V3-01-B27 (15-22)	1314V3-01-B28 (0-4.5)	1314V3-01-B29 (0-5)	1314V3-01-B30 (0-6)	1314V3-01-B32 (0-6)		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil	Soil							
MATRIX	0-8	8-15	15-22	0-4.5	0-5	0-6	0-6							
DEPTH (feet)	9.1 #	8.9	8.8	9.4 #	9.4 #	9.7 #	8.2							
pH	0 - 0.2													
PID (meter units)	0													
SVOCs (mg/kg)														
Benzo(a)anthracene	2 †mr*	18 †mr*	0.061	ND U	0.0053 J	0.0088 J	0.028 J	0.9	1.8	1.1	1.8	170	--	
Benzo(a)pyrene	11 †mr*	10 †mr*	0.058	ND U	ND U	ND U	0.031 J	0.09	2.1	1.3	2.1	17	--	
Benzo(b)fluoranthene	17 †mr*	16 †mr*	0.091	ND U	ND U	0.016 J	0.043	0.9	2.1	1.5	2.1	170	--	
Carbazole	0.17 J	4.8 †	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--	
Dibenz(a,h)anthracene	2.1 †mr*	0.86 †mr*	0.0093 J	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--	
Indeno(1,2,3-cd)pyrene	5.8 †mr*	2.5 †mr*	0.021 J	ND U	ND U	ND U	0.016 J	0.9	1.6	0.9	1.6	170	--	
Naphthalene	0.3	15 †c	0.017 J	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--	
Inorganics (mg/kg)														
Cadmium	1.2	0.37	0.13	0.14 J	0.18	0.32	0.22	5.2	--	--	78	200	--	
Chromium	26 †	8.4	13	12	12	12	9.6	21	--	--	230	690	--	
Lead	1,600 †rc	49	13	9.5	14	9.7	36	107	--	--	400	700	--	
Manganese	200	350	280	180 J	290	350	930 †m	630	636	--	1,600	4,100	--	
TCLP Metals (mg/L)														
Cadmium	0.0086 L	ND U	0.0021 J	0.0028 J	ND U	ND U	ND U	--	--	--	--	--	0.005	
Chromium	ND U	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1	
Lead	0.37 L	ND U	0.0077 L	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075	
Manganese	6.2 L	5.3 L	3.1 L	5.4 L	0.58 L	0.24 L	0.6 L	--	--	--	--	--	0.15	
SPLP Metals (mg/L)														
Cadmium	ND U	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.005	
Lead	1.4 L	NA	0.023 L	NA	NA	NA	NA	--	--	--	--	--	0.0075	
Manganese	0.74 L	0.74 L	0.37 L	1.9 L	1.4 L	1.3 L	0.31 L	--	--	--	--	--	0.15	

**Key to Data Table**

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.  
 [Yellow Box] = Concentration exceeds the most Stringent MAC, but is below the MAC for an MSA.

PID = Photoionization detector.  
 J = Estimated value.  
 U = Analyte was analyzed for but not detected.  
 # = pH is less than 6.25 or greater than 9.0 standard units.  
 † = Concentration exceeds the most stringent MAC.  
 m = Concentration exceeds the MAC for an MSA.  
 \* = Concentration exceeds the MAC for Chicago corporate limits.  
 r = Concentration exceeds the TACO Tier 1 RO for residential exposure.  
 c = Concentration exceeds a TACO Tier 1 RO for construction worker exposure.  
 L = The detected concentration exceeds the TACO Tier 1 RO for the SCGIER.  
 [Grey Box] = Concentration exceeds applicable comparison criteria.

CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUGHES	CHECKED BY: J. JENKINS		<b>CONTAMINANTS OF CONCERN</b> FAI 74 - INTERSTATE 74 (CONTRACT # 64E26) SITE 1314V3-1, BORINGS B27 TO B32	PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I 74)	CITY: MOLINE	DATE: 2/23/2017	FIGURE 4-3
REVISION 0	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT		IDOT PROJECT # P-93-032-01	WORK ORDER 46	COUNTY: ROCK ISLAND	SCALE: 1" = 100'		

**CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-1 (IDOT ROW)								Comparison Criteria							
	1314V3-01-B33		1314V3-01-B34			1314V3-01-B35			MACs			TACO				
BORING	1314V3-01-B33 (0-2.5)		1314V3-01-B34 (0-7)		1314V3-01-B34 (7-14)		1314V3-01-B34 (14-20)		1314V3-01-B35 (0-7)		1314V3-01-B35 (0-7)D		1314V3-01-B35 (7-14)		1314V3-01-B35 (14-20)	
SAMPLE	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
MATRIX	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
DEPTH (feet)	0-2.5		0-7		7-14		14-20		0-7		0-7		7-14		14-20	
pH	9.1 #		8.6		8.6		8.6		8.6		8.5		8.2		8.6	
PID (meter units)	0		0		0		0		0		0		0		0	
SVOCs (mg/kg)																
Benzo(a)pyrene	0.13 †	0.055	0.03 J	ND U	0.024 J	0.021 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--	--	--
Inorganics (mg/kg)																
Iron	12,000	12,000	12,000	12,000	11,000	10,000	7,600	11,000	15,000	15,900	--	--	--	--	--	--
Lead	75	37	8.8	8.1	9.7	17	7	7.6	107	--	--	400	700	--	--	--
Manganese	370	330	360	250	300	180	88	230	630	636	--	1,600	4,100	--	--	--
TCLP Metals (mg/L)																
Iron	ND U	ND U	ND U	2.7	ND U	0.24 J	ND U	0.93	--	--	--	--	--	--	5	--
Lead	ND U	ND U	ND U	ND U	0.0093 L	ND U	ND U	ND U	--	--	--	--	--	--	0.0075	--
Manganese	0.031	3.7 L	1.1 L	3.9 L	5.9 L	5.5 L	4.7 L	3.6 L	--	--	--	--	--	--	0.15	--
SPLP Metals (mg/L)																
Lead	NA	NA	NA	NA	0.031 L	NA	NA	NA	--	--	--	--	--	--	0.0075	--
Manganese	NA	0.76 L	0.21 L	0.35 L	0.21 L	0.36 L	0.31 L	0.42 L	--	--	--	--	--	--	0.15	--

SITE	ISGS #1314V3-1 (IDOT ROW)				ISGS #1314V3-66 (Scottish Rite Masonic Center)			Comparison Criteria					
	1314V3-01-B36				1314V3-66-B01		1314V3-66-B02	MACs			TACO		
BORING	1314V3-01-B36 (0-8)				1314V3-66-B01 (0-7)		1314V3-66-B01 (0-7)D	1314V3-66-B02 (0-6)					
SAMPLE	Soil				Soil		Soil	Soil					
MATRIX	Soil				Soil		Soil	Soil					
DEPTH (feet)	0-8				8-16		16-24	24-28					
pH	8.4				8.3		8.5	8.2					
PID (meter units)	0				0		0	0					
Inorganics (mg/kg)													
Iron	15,000	16,000 †m	12,000	7,400	13,000	13,000	15,000	15,000	15,900	--	--	--	--
Lead	7.9	8.7	6.5	4.3	8.5	15	7.8	107	--	--	400	700	--
Manganese	140	600	370	250	360	350	670 †m	630	636	--	1,600	4,100	--
TCLP Metals (mg/L)													
Iron	ND U	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	0.011 L	ND U	ND U	ND U	0.008 L	ND U	--	--	--	--	--	0.0075
Manganese	6.7 L	10 L	3.4 L	3.4 L	0.27 L	0.14	ND U	--	--	--	--	--	0.15
SPLP Metals (mg/L)													
Lead	NA	0.069 L	NA	NA	NA	0.073 J L	NA	--	--	--	--	--	0.0075
Manganese	0.73 L	0.59 L	0.57 L	0.13	0.58 J L	NA	NA	--	--	--	--	--	0.15

**Key to Data Table**

- 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.
- ☐ = Concentration exceeds the most Stringent MAC, but is below the MAC for an MSA.
- ND = Not detected.
- NA = Not analyzed.
- PID = Photoionization detector.
- J = Estimated value.
- U = Analyte was analyzed for but not detected.
- # = pH is less than 6.25 or greater than 9.0 standard units.
- † = Concentration exceeds the most stringent MAC.
- m = Concentration exceeds the MAC for an MSA.
- L = The detected concentration exceeds the TACO Tier 1 RO for the SCGIER.
- ☐ = Concentration exceeds applicable comparison criteria.

CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUGHES	CHECKED BY: J. JENKINS		<b>CONTAMINANTS OF CONCERN</b> FAI 74 - INTERSTATE 74 (CONTRACT # 64E26) SITE 1314V3-1, BORINGS B33 TO B36, SITE 1314V3-66		PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I 74)	CITY: MOLINE	DATE: 2/23/2017	FIGURE 4-4
REVISION 0	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT		IDOT PROJECT # P-93-032-01	WORK ORDER 46	COUNTY: ROCK ISLAND	SCALE: 1" = 100'			

**CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-67 (Vacant Land)						Comparison Criteria						
	1314V3-67-B01		1314V3-67-B02	1314V3-67-B03	1314V3-67-B04		MACs			TACO			
BORING	1314V3-67-B01 (0-5)		1314V3-67-B01 (5-9)	1314V3-67-B02 (0-6)	1314V3-67-B03 (0-4)	1314V3-67-B04 (0-7)	1314V3-67-B04 (7-13)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-67-B01 (0-5)		1314V3-67-B01 (5-9)	1314V3-67-B02 (0-6)	1314V3-67-B03 (0-4)	1314V3-67-B04 (0-7)	1314V3-67-B04 (7-13)						
MATRIX	Soil		Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5		5-9	0-6	0-4	0-7	7-13						
pH	8.3		8.2	8.2	8.9	7.9	8.1						
PID (meter units)	0		0	0	0	0	0						
Inorganics (mg/kg)													
Lead	32	50	6.3	7.9	8	50	107	--	--	--	400	700	--
Manganese	460	230	960 †m	290	190	310	630	636	--	--	1,600	4,100	--
TCLP Metals (mg/L)													
Lead	0.0091 L	0.033 L	ND U	ND U	ND U	0.024 L	--	--	--	--	--	--	0.0075
Manganese	0.81 L	1.1 L	0.11	0.52 L	0.41 L	2.3 L	--	--	--	--	--	--	0.15
SPLP Metals (mg/L)													
Lead	0.074 L	0.25 L	NA	NA	NA	0.089 L	--	--	--	--	--	--	0.0075
Manganese	0.24 L	0.32 L	NA	0.67 L	0.2 L	0.17 L	--	--	--	--	--	--	0.15

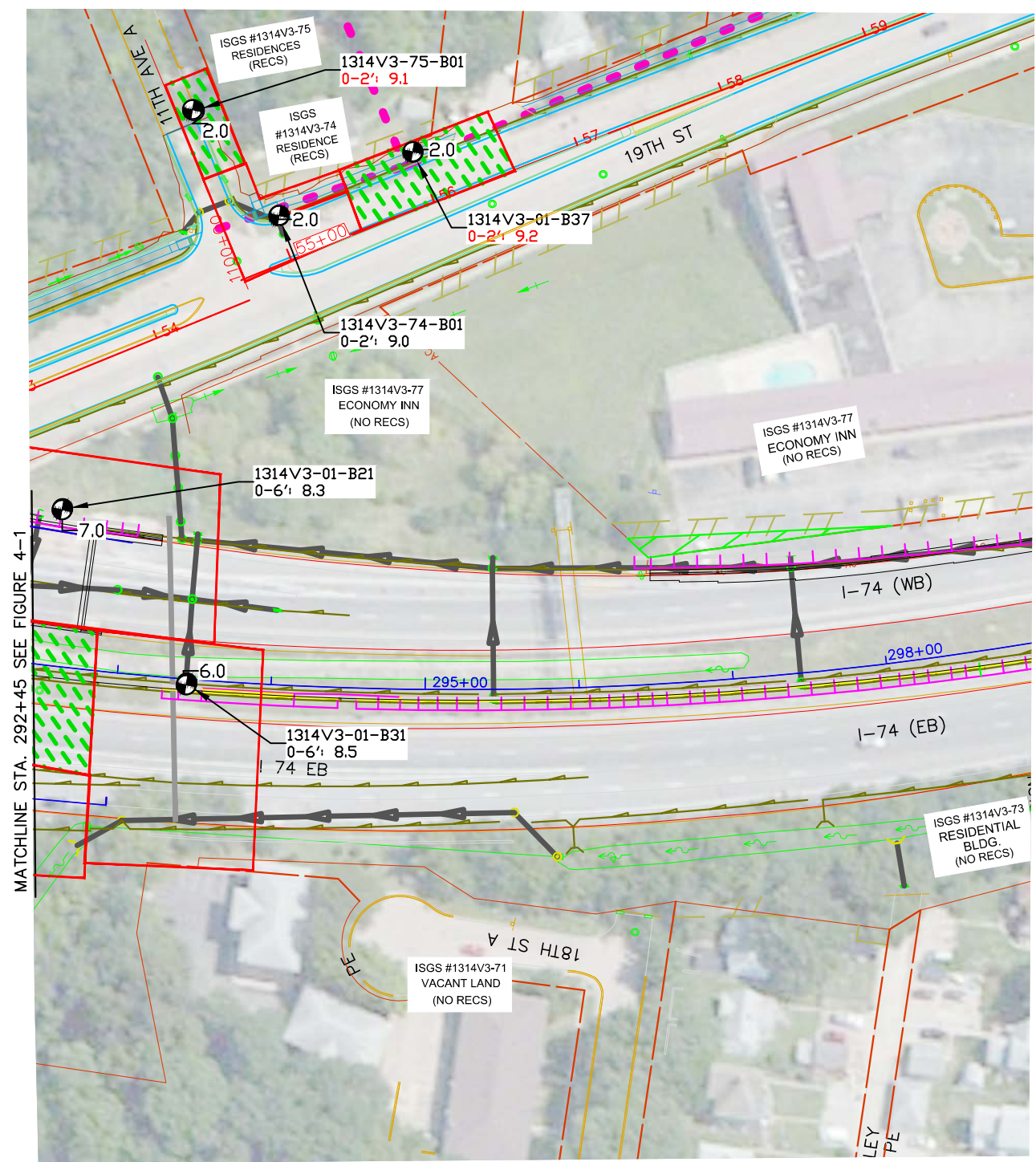
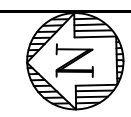
SITE	ISGS #1314V3-67 (Vacant Land)				Comparison Criteria								
	1314V3-67-B05	1314V3-67-B06	1314V3-67-B07	1314V3-67-B08	MACs			TACO					
BORING	1314V3-67-B05 (0-6)				1314V3-67-B06 (0-4)	1314V3-67-B07 (0-4)	1314V3-67-B08 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-67-B05 (0-6)				1314V3-67-B06 (0-4)	1314V3-67-B07 (0-4)	1314V3-67-B08 (0-4)						
MATRIX	Soil				Soil	Soil	Soil						
DEPTH (feet)	0-6				0-4	0-4	0-4						
pH	9				8.7	8.3	8.2						
PID (meter units)	0				0	0	0						
Inorganics (mg/kg)													
Manganese	290	330	310	480	630	636	--	1,600	4,100	--			
TCLP Metals (mg/L)													
Manganese	1.6 L	0.33 L	0.024 J	ND U	--	--	--	--	--	--	--	0.15	
SPLP Metals (mg/L)													
Manganese	1 L	0.48 J L	NA	NA	--	--	--	--	--	--	--	0.15	

**Key to Data Table**

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.  
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 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.  
 PID = Photoionization detector.  
 J = Estimated value.  
 U = Analyte was analyzed for but not detected.  
 † = Concentration exceeds the most stringent MAC.  
 m = Concentration exceeds the MAC for an MSA.  
 L = The detected concentration exceeds the TACO Tier 1 RO for the SCGIER.  
 [Grey Box] = Concentration exceeds applicable comparison criteria.

CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUGHES	CHECKED BY: J. JENKINS		CONTAMINANTS OF CONCERN FAI 74 - INTERSTATE 74 (CONTRACT # 64E26) SITE 1314V3-67	PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I 74)	CITY: MOLINE	DATE: 2/23/2017	FIGURE 4-5
REVISION 0	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT			IDOT PROJECT # P-93-032-01	WORK ORDER 46	COUNTY: ROCK ISLAND	SCALE: 1" = 100'	

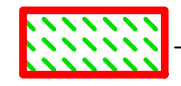


**CONTAMINANTS OF CONCERN**

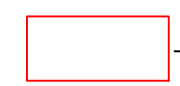
SITE	ISGS #1314V3-1 (IDOT ROW)					ISGS #1314V3-74 (Residence)	ISGS #1314V3-75 (Residence)	Comparison Criteria					
	1314V3-01-B21	1314V3-01-B31	1314V3-01-B37	1314V3-74-B01	1314V3-75-B01			MACs			TACO		
BORING	1314V3-01-B21 (0-6)	1314V3-01-B31 (0-6)	1314V3-01-B37 (0-2)	1314V3-74-B01 (0-2)	1314V3-75-B01 (0-2)								
SAMPLE													
MATRIX	Soil	Soil	Soil	Soil	Soil								
DEPTH (feet)	0-6	0-6	0-2	0-2	0-2								
pH	8.3	8.5	9.2 #	9	9.1 #								
PID (meter units)	0	0	0	0	0			Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
Inorganics (mg/kg)													
Iron	13,000	14,000	16,000 †m	13,000	17,000 †m	15,000	15,900	--	--	--	--	--	--
Lead	11	6.7	9.1	9	81	107	--	--	--	400	700	--	--
Manganese	300	440	350	330	440	630	636	--	--	1,600	4,100	--	--
TCLP Metals (mg/L)													
Iron	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	0.016 L	--	--	--	--	--	--	--	0.0075
Manganese	0.96 L	2.5 L	1.1 L	0.95 L	0.49 L	--	--	--	--	--	--	--	0.15
SPLP Metals (mg/L)													
Lead	NA	NA	NA	NA	0.3 L	--	--	--	--	--	--	--	0.0075
Manganese	0.72 L	0.59 L	0.88 L	1.1 L	0.8 L	--	--	--	--	--	--	--	0.15

**Key to Data Table**

- 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.
- PID = Photoionization detector.
- U = Analyte was analyzed for but not detected.
- # = pH is less than 6.25 or greater than 9.0 standard units.
- † = Concentration exceeds the most stringent MAC.
- m = Concentration exceeds the MAC for an MSA.
- L = The detected concentration exceeds the TACO Tier 1 RO for the SCGIER.
- █ = Concentration exceeds applicable comparison criteria.



PROPOSED CONSTRUCTION EXCAVATION AREA WHERE pH IS GREATER THAN 9.0 STANDARD UNITS AND COCs WERE DETECTED ABOVE THE MOST STRINGENT MACs ONLY, OR TCLP/SPLP METALS WERE DETECTED ABOVE THE TACO CLASS I SCGIER.



PROPOSED CONSTRUCTION EXCAVATION AREA WHERE ONE OR MORE CONTAMINANTS OF CONCERN IN SOIL EXCEED THE MOST STRINGENT MACs, BUT ARE BELOW LOCATION-SPECIFIC MACs FOR A METROPOLITAN STATISTICAL AREA OR TCLP/SPLP METALS EXCEED THE TACO CLASS I RO FOR THE SCGIER, BUT THE TOTAL METAL CONCENTRATION IS BELOW THE MAC.

**LEGEND**

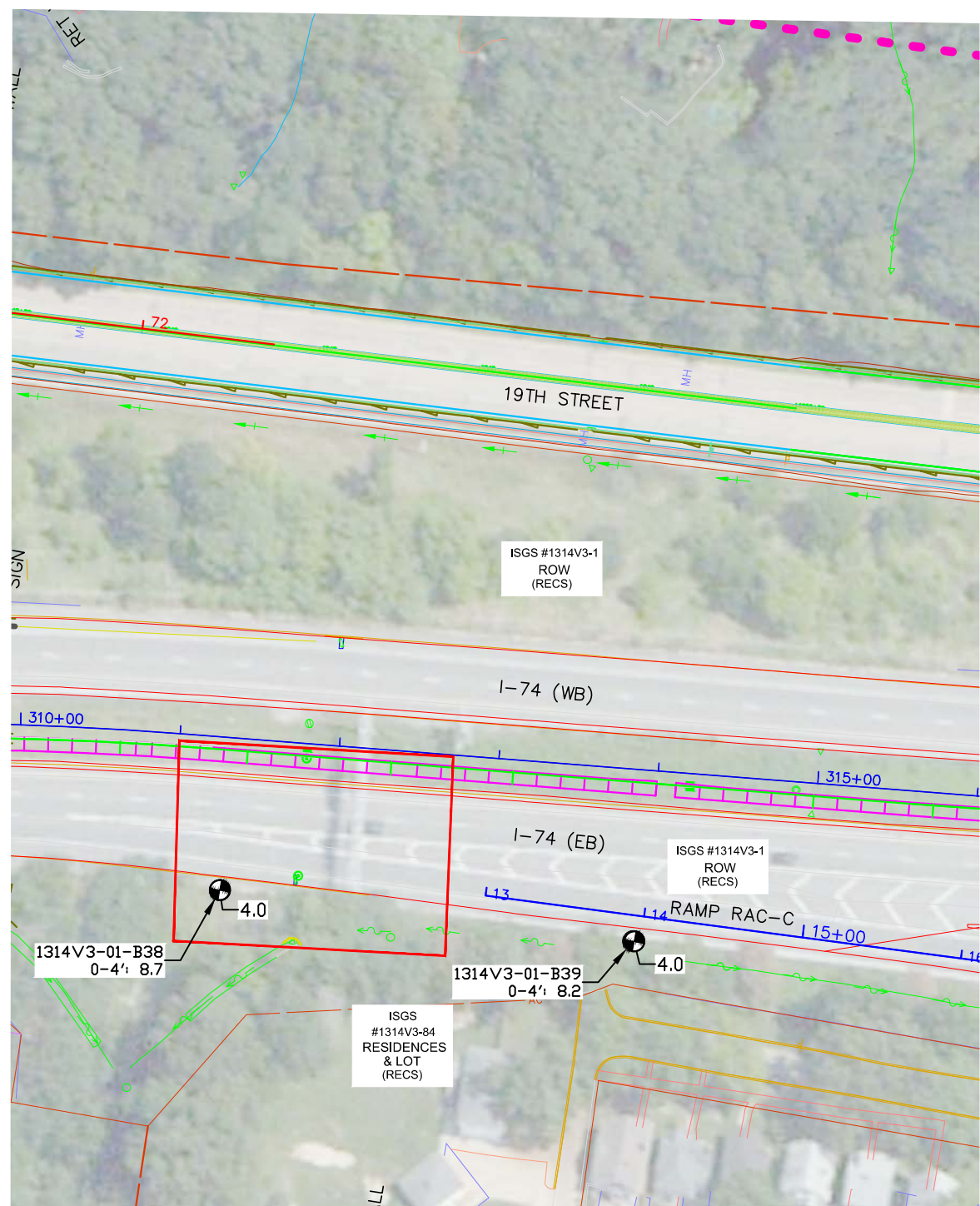
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- ⊙ — EXISTING MANHOLE
- ⊙ — PROPOSED MANHOLE
- — EXISTING CATCH BASIN
- — PROPOSED CATCH BASIN
- PROPOSED CULVERT
- PROPOSED BRIDGE STRUCTURE
- ▨ — PROPERTY TAKE
- PROPOSED UNDERDRAIN
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- EXISTING ROAD
- PROPOSED ROAD
- ⊙ 2.0 — PROPOSED BORING LOCATION (DEPTH IN FEET)
- EXISTING CENTERLINES
- EXISTING CENTERLINES
- EXISTING ROW
- PROPOSED ROW
- APPROXIMATE PESA SITE BOUNDARY
- PROPOSED DITCH
- PROPOSED ANCHOR SLAB

SCALE IN FEET



CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUGHES	CHECKED BY: J. JENKINS	 Global Environmental Specialists	INVESTIGATION DATA SUMMARY	PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I-74)	CITY: MOLINE	DATE: 3/10/2017	FIGURE
REVISION 1	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT		FAI 74 - INTERSTATE 74 (CONTRACT # 64E26)	IDOT PROJECT # P-93-032-01	WORK ORDER 46 / C#: 64E26	COUNTY: ROCK ISLAND	SCALE: 1" = 100'	4-6





**CONTAMINANTS OF CONCERN**

SITE	ISGS #1314V3-1 (IDOT ROW)		Comparison Criteria					
	1314V3-01-B38	1314V3-01-B39	MACs			TACO		
BORING	1314V3-01-B38 (0-4)	1314V3-01-B39 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-01-B38 (0-4)	1314V3-01-B39 (0-4)						
MATRIX	Soil	Soil						
DEPTH (feet)	0-4	0-4						
pH	8.7	8.2						
PID (meter units)	0	0						
Inorganics (mg/kg)								
Manganese	250	440	630	636	--	1,600	4,100	--
TCLP Metals (mg/L)								
Manganese	0.46 L	0.018 J	--	--	--	--	--	0.15
SPLP Metals (mg/L)								
Manganese	1.6 L	NA	--	--	--	--	--	0.15

**Key to Data Table**

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

PID = Photionization detector.

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.

NA = Not analyzed.

J = Estimated value.

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

█ = Concentration exceeds applicable comparison criteria.

PROPOSED CONSTRUCTION EXCAVATION AREA WHERE ONE OR MORE CONTAMINANTS OF CONCERN IN SOIL EXCEED THE MOST STRINGENT MACS, BUT ARE BELOW LOCATION-SPECIFIC MACS FOR A METROPOLITAN STATISTICAL AREA OR TCLP/SPLP METALS EXCEED THE TACO CLASS I RO FOR THE SCGIER, BUT THE TOTAL METAL CONCENTRATION IS BELOW THE MAC.



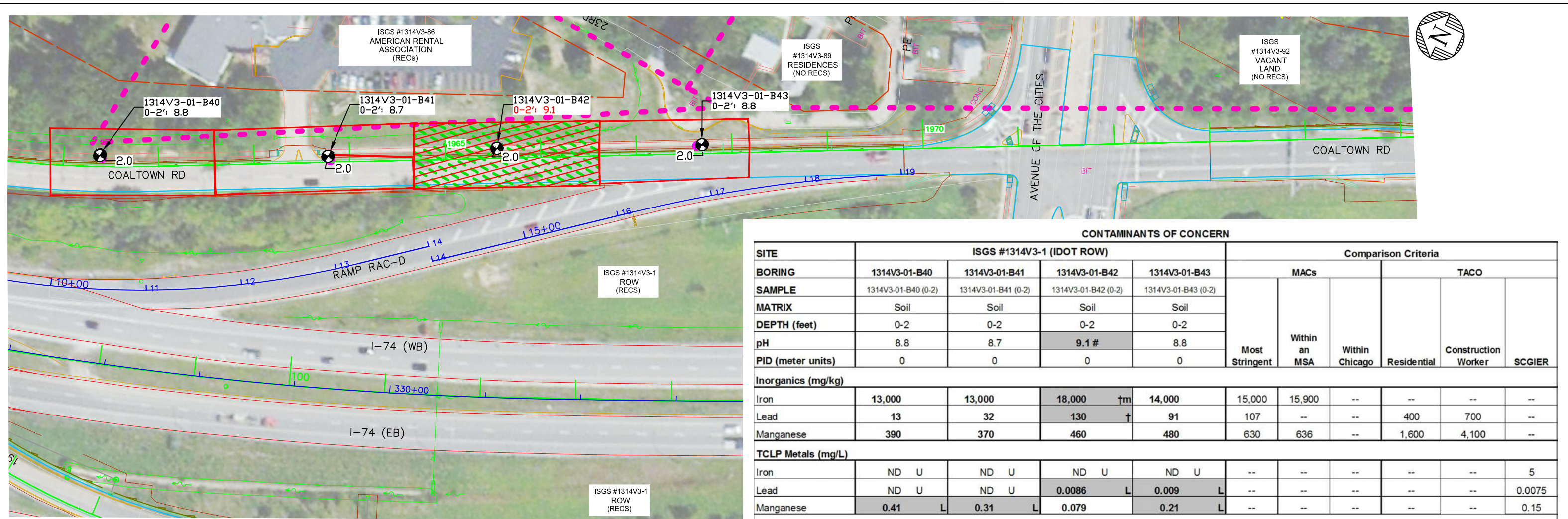
**LEGEND**

- ▶ — PROPOSED STORM SEWER
- ▶ — PROPOSED CULVERT
- TT TT — PROPOSED TEMPORARY EASEMENT
- — — — — PROPOSED DITCH
- ◁ — EXISTING STORM SEWER
- — — — — PROPOSED BRIDGE STRUCTURE
- TTTTTT — PROPOSED PERMANENT EASEMENT
- — — — — EXISTING CENTERLINES
- ⊙ — EXISTING MANHOLE
- ◻ — PROPOSED PROPERTY TAKE
- — — — — EXISTING CENTERLINES
- — — — — PROPOSED ANCHOR SLAB
- — PROPOSED MANHOLE
- ◻ — PROPERTY TAKE
- — — — — EXISTING ROAD
- — — — — EXISTING ROW
- — EXISTING CATCH BASIN
- — — — — PROPOSED UNDERDRAIN
- — — — — EXISTING ROAD
- — — — — PROPOSED ROW
- — PROPOSED CATCH BASIN
- — — — — PROPOSED ROAD
- — — — — APPROXIMATE PESA SITE BOUNDARY
- ⊙ 2.0 — PROPOSED BORING LOCATION (DEPTH IN FEET)

SCALE IN FEET



CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUEGHS	CHECKED BY: J. JENKINS	 Global Environmental Specialists	INVESTIGATION DATA SUMMARY	PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I 74)	CITY: MOLINE	DATE: 3/10/2017	FIGURE
REVISION 1	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT		FAI 74 - INTERSTATE 74 (CONTRACT # 64E26)	IDOT PROJECT # P-93-032-01	WORK ORDER 46 / C#: 64E26	COUNTY: ROCK ISLAND	SCALE: 1" = 100'	4-7



SITE	ISGS #1314V3-1 (IDOT ROW)				Comparison Criteria					
	1314V3-01-B40	1314V3-01-B41	1314V3-01-B42	1314V3-01-B43	MACs			TACO		
	1314V3-01-B40 (0-2)	1314V3-01-B41 (0-2)	1314V3-01-B42 (0-2)	1314V3-01-B43 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
<b>SAMPLE</b>										
<b>MATRIX</b>	Soil	Soil	Soil	Soil						
<b>DEPTH (feet)</b>	0-2	0-2	0-2	0-2						
<b>pH</b>	8.8	8.7	9.1 #	8.8						
<b>PID (meter units)</b>	0	0	0	0						
<b>Inorganics (mg/kg)</b>										
Iron	13,000	13,000	18,000 †m	14,000	15,000	15,900	--	--	--	--
Lead	13	32	130 †	91	107	--	--	400	700	--
Manganese	390	370	460	480	630	636	--	1,600	4,100	--
<b>TCLP Metals (mg/L)</b>										
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	0.0086 L	0.009 L	--	--	--	--	--	0.0075
Manganese	0.41 L	0.31 L	0.079	0.21 L	--	--	--	--	--	0.15
<b>SPLP Metals (mg/L)</b>										
Lead	NA	NA	0.3 L	0.14 L	--	--	--	--	--	0.0075
Manganese	1.2 L	0.89 L	NA	0.69 L	--	--	--	--	--	0.15

- PROPOSED CONSTRUCTION EXCAVATION AREA WHERE ONE OR MORE CONTAMINANTS OF CONCERN IN SOIL EXCEED THE MOST STRINGENT MACS, BUT ARE BELOW LOCATION-SPECIFIC MACS FOR A METROPOLITAN STATISTICAL AREA OR TCLP/SPLP METALS EXCEED THE TACO CLASS I RO FOR THE SCGIER, BUT THE TOTAL METAL CONCENTRATION IS BELOW THE MAC.
- PROPOSED CONSTRUCTION EXCAVATION AREA WHERE ONE OR MORE CONTAMINANTS OF CONCERN WERE DETECTED ABOVE APPLICABLE REFERENCE CONCENTRATIONS
- PROPOSED CONSTRUCTION EXCAVATION AREA WHERE pH IS GREATER THAN 9.0 STANDARD UNITS AND COCs WERE DETECTED ABOVE THE MOST STRINGENT MACS ONLY, OR TCLP/SPLP METALS WERE DETECTED ABOVE THE TACO CLASS I SCGIER.

**Key to Data Table**

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

mg/kg = Milligrams per kilogram.  
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 MSA = Metropolitan Statistical Area  
 TACO = Tiered Approach to Corrective Action Objectives  
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ND = Not detected.  
 NA = Not analyzed.  
 PID = Photoionization detector.  
 U = Analyte was analyzed for but not detected.  
 # = pH is less than 6.25 or greater than 9.0 standard units.  
 † = Concentration exceeds the most stringent MAC.  
 m = Concentration exceeds the MAC for an MSA.  
 L = The detected concentration exceeds the TACO Tier 1 RO for the SCGIER.  
 [Grey box] = Concentration exceeds applicable comparison criteria.

**LEGEND**

- PROPOSED STORM SEWER
- PROPOSED CULVERT
- PROPOSED TEMPORARY EASEMENT
- PROPOSED ROAD
- PROPOSED DITCH
- EXISTING STORM SEWER
- PROPOSED BRIDGE STRUCTURE
- PROPOSED PERMANENT EASEMENT
- EXISTING CENTERLINES
- PROPOSED ANCHOR SLAB
- EXISTING MANHOLE
- PROPOSED MANHOLE
- PROPERTY TAKE
- EXISTING ROAD
- PROPOSED CENTERLINES
- EXISTING ROW
- EXISTING CATCH BASIN
- PROPOSED UNDERDRAIN
- PROPOSED BORING LOCATION (DEPTH IN FEET)
- PROPOSED ROW
- APPROXIMATE PESA SITE BOUNDARY
- PROPOSED CATCH BASIN



CAD FILE EE9 WO46 PSI DWG	DESIGNED BY: J. HUGHES	CHECKED BY: J. JENKINS	 Global Environmental Specialists	<b>INVESTIGATION DATA SUMMARY</b> FAI 74 - INTERSTATE 74 (CONTRACT # 64E26) STA. 97+00 TO STA. 104+75	PTB/JOB 172-027/ P-30-010-14	ROUTE: FAI 74 (I 74)	CITY: MOLINE	DATE: 3/10/2017	FIGURE
REVISION 1	DRAWN BY: V. GEE	APPROVED BY: D. TIEBOUT			IDOT PROJECT # P-93-032-01	WORK ORDER 46 / C#: 64E26	COUNTY: ROCK ISLAND	SCALE: 1" = 100'	4-8

# 5

## Conclusions and Recommendations

E & E's investigation has identified COCs in project area soils. The following sections summarize E & E's investigation findings and recommendation for classification and management of impacted soil based on the comparison with MACs and TACO Tier 1 ROs. E & E has included an uncontaminated soil certification form in Appendix E for each site with soil that was found to meet the criteria for off-site management at a CCDD facility or USFO.

E & E's field investigation was designed to provide an initial characterization of site conditions at pre-designated boring locations. The investigation was limited in terms of analytical parameters and the number of samples collected, based on the known history of the property. Consequently, the findings and conclusion of this investigation are subject to revision if more site data becomes available. Soil removed from outside E & E's investigation area that exhibits discoloration or odor indicative of contamination should be sampled to determine the proper disposal classification.

### 5.1 Estimated Soil Management Volumes and Costs

#### 5.1.1 ISGS #1314V3-1 (IDOT ROW)

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, lead, iron, and manganese were identified as COCs in soil at ISGS #1314V3-1 (IDOT ROW). VOCs were detected during headspace screening of site soil at boring 1314V3-01-B27, and the pH levels for soil associated with eight borings were above the acceptable range for management of the soil at a CCDD facility or USFO.

Soil associated with the following borings may be managed on-site as fill. If it cannot be managed on-site, soil associated with the borings may be managed off-site as uncontaminated soil at a CCDD facility or USFO within an MSA.

- 1314V3-01-B12 (TCLP/SPLP manganese)
- 1314V3-01-B14 (TCLP/SPLP iron and TCLP/SPLP manganese)
- 1314V3-01-B15 (TCLP/SPLP manganese)
- 1314V3-01-B19 (TCLP/SPLP manganese)
- 1314V3-01-B20 (TCLP/SPLP manganese)

- 1314V3-01-B21 (TCLP/SPLP manganese)
- 1314V3-01-B22 (TCLP/SPLP manganese)
- 1314V3-01-B24 (TCLP/SPLP manganese)
- 1314V3-01-B31 (TCLP/SPLP manganese)
- 1314V3-01-B34 (TCLP/SPLP manganese)
- 1314V3-01-B35 (TCLP/SPLP lead and TCLP/SPLP manganese)
- 1314V3-01-B36 (TCLP/SPLP lead and TCLP/SPLP manganese)
- 1314V3-01-B38 (TCLP/SPLP manganese)
- 1314V3-01-B40 (TCLP/SPLP manganese)
- 1314V3-01-B41 (TCLP/SPLP manganese)
- 1314V3-01-B43 (TCLP/SPLP lead and TCLP/SPLP manganese)

Soil associated with boring 1314V3-01-B26 (benzo(a)pyrene and TCLP/SPLP manganese) may be managed on-site as fill. If it cannot be managed on-site, soil associated with the boring may be managed off-site as uncontaminated soil at a CCDD facility or USFO within an MSA, including Chicago.

Soil associated with following borings may be managed on-site as fill. If it cannot be managed on-site, soil associated with the borings must be managed off-site as non-special waste, providing that a non-special waste certification is submitted by the generator according to the conditions set forth in 415 ILCS 5/22.48 and 415 ILCS 5/3.475:

- 1314V3-01-B13 (pH, TCLP/SPLP manganese)
- 1314V3-01-B28 (pH, TCLP/SPLP manganese)
- 1314V3-01-B29 (pH, TCLP/SPLP manganese)
- 1314V3-01-B30 (pH, TCLP/SPLP manganese)
- 1314V3-01-B32 (manganese)
- 1314V3-01-B33 (pH, TCLP/SPLP manganese)
- 1314V3-01-B37 (pH, TCLP/SPLP manganese)
- 1314V3-01-B42 (lead)

The property history and available analytical data indicate a non-special waste certification can be applied to soil associated with the borings.

Soil associated with boring 1314V3-01-B27 (VOCs, pH, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, dibenzo(a,h)anthracene, indeno[1,2,3-cd]pyrene, naphthalene, lead, and TCLP/SPLP manganese) must be managed off-site as non-special waste.

COCs were not identified in soil associated with the following borings. Soil associated with the borings may be managed without restriction.

- 1314V3-01-B16
- 1314V3-01-B17
- 1314V3-01-B18
- 1314V3-01-B23
- 1314V3-01-B25
- 1314V3-01-B39

Costs estimated for the off-site disposal of soil are presented in Table 5-1. Based on the estimated construction excavation quantities presented in Table 4-5, E & E estimates that approximately 17,007 cubic yards of soil at the site may be managed off-site as uncontaminated soil to a CCDD facility or USFO, and 8,288 cubic yards of soil at the site must be managed off-site as non-special waste. The estimated cost for off-site disposal of soil removed from the site is \$1,620,515.00.

#### **5.1.2 ISGS #1314V3-66 (Scottish Rite Masonic Center)**

Lead and manganese were identified as COCs in soil at ISGS #1314V3-66 (Scottish Rite Masonic Center). VOCs were not detected during headspace screening of site soil, and the soil pH levels were within the acceptable range for management of the soil at a CCDD facility or USFO.

Soil associated with boring 1314V3-66-B01 (TCLP/SPLP lead and TCLP/SPLP manganese) may be managed on-site as fill. If it cannot be managed on-site, soil associated with the boring may be managed off-site as uncontaminated soil at a CCDD facility or USFO within an MSA.

COCs were not identified in soil associated with boring 1314V3-66-B02. Soil associated with the boring may be managed without restriction.

Costs estimated for the off-site disposal of soil are presented in Table 5-1. Based on the estimated construction excavation quantities presented in Table 4-5, E & E estimates that approximately 874 cubic yards of soil at the site may be managed off-site as uncontaminated soil to a CCDD facility or USFO. The estimated cost for off-site disposal of soil removed from the site is \$57,571.00.

#### **5.1.3 ISGS #1314V3-67 (Vacant Land)**

Lead and manganese were identified as COCs in soil at ISGS #1314V3-67 (Vacant Land). VOCs were not detected during headspace screening of site soil, and the soil pH levels were within the acceptable range for management of the soil at a CCDD facility or USFO.

Soil associated with the following borings may be managed on-site as fill. If it cannot be managed on-site, soil associated with the borings may be managed off-site as uncontaminated soil at a CCDD facility or USFO within an MSA.

- 1314V3-67-B01 (TCLP/SPLP lead and TCLP/SPLP manganese)
- 1314V3-67-B03 (TCLP/SPLP manganese)
- 1314V3-67-B04 (TCLP/SPLP lead and TCLP/SPLP manganese)
- 1314V3-67-B05 (TCLP/SPLP manganese)
- 1314V3-67-B06 (TCLP/SPLP manganese)

COCs were not identified in soil associated with borings 1314V3-67-B02, 1314V3-67-B07, and 1314V3-67-B08. Soil associated with the borings may be managed without restriction.

Costs estimated for the off-site disposal of soil are presented in Table 5-1. Based on the estimated construction excavation quantities presented in Table 4-5, E & E estimates that approximately 3,895 cubic yards of soil at the site may be managed off-site as uncontaminated soil to a CCDD facility or USFO. The estimated cost for off-site disposal of soil removed from the site is \$250,915.00.

#### **5.1.4 ISGS #1314V3-74 (Residence)**

Manganese was the lone COC identified in soil at ISGS #1314V3-74 (Residence). VOCs were not detected during headspace screening of site soil. The pH of soil associated with the boring collected from the site was within the acceptable range for management of the soil at a CCDD facility or USFO.

Soil associated with boring 1314V3-74-B01 (TCLP/SPLP manganese) may be managed on-site as fill. If it cannot be managed on-site, soil associated with the boring may be managed off-site as uncontaminated soil at a CCDD facility or USFO within an MSA.

Costs estimated for the off-site disposal of soil are presented in Table 5-1. Based on the estimated construction excavation quantities presented in Table 4-5, E & E estimates that approximately 199 cubic yards of soil at the site may be managed off-site as uncontaminated soil to a CCDD facility or USFO. The estimated cost for off-site disposal of soil removed from the site is \$14,371.00.

#### **5.1.5 ISGS #1314V3-75 (Residence)**

Lead and manganese were identified as COCs in soil at ISGS #1314V3-75 (Residence). VOCs were not detected during headspace screening of site soil. The pH associated with soil from the boring was above the acceptable range for management of the soil at a CCDD facility or USFO.

Soil associated with boring 1314V3-75-B01 (pH, TCLP/SPLP lead, and TCLP/SPLP manganese) may be managed on-site as fill. If it cannot be managed on-site, soil associated with the boring must be managed off-site as non-special waste, providing that a non-special waste certification is submitted by the generator according to the conditions set forth in 415 ILCS 5/22.48 and 415 ILCS

5/3.475. The property history and available analytical data indicate a non-special waste certification can be applied to soil associated with the boring.

Costs estimated for the off-site disposal of soil are presented in Table 5-1. Based on the estimated construction excavation quantities presented in Table 4-5, E & E estimates that approximately 200 cubic yards of soil at the site will require off-site disposal as non-special waste if it cannot be managed on-site. The estimated cost for off-site disposal of soil removed from the site is \$14,435.00.

## **5.2 Soil Management Areas and Applicable Regulations**

### **5.2.1 ISGS #1314V3-1 (IDOT ROW)**

Station 277+30 to Station 278+40 (I-74 WB), 0 to 145' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 278+40 to Station 279+00 (I-74 WB), 0 to 145' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH and manganese.

Station 279+00 to Station 280+50 (I-74 WB), 0 to 145' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: iron and manganese.

Station 280+50 to Station 282+00 (I-74 WB), 0 to 145' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 287+30 to Station 289+25 (I-74 WB), 25' to 140' (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 50+05 to Station 52+25 (19th Street), 0 to 100' RT and 0 to 100' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 291+40 to Station 293+60 (I-74 WB), 20' to 130' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

## 5 Conclusions and Recommendations

Station 277+30 to Station 280+15, (I-74 EB), 0 to 125' RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 281+50 to Station 282+95 (I-74 EB), 0 to 130' RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.

Station 284+40 to Station 286+00 (I-74 EB), 0 to 120' RT, 0 to 140' RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and manganese.

Station 286+00 to Station 287+30 (I-74 EB), 0 to 120' RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, dibenzo(a,h)anthracene, indeno(1,2,3-dc)pyrene, naphthalene, manganese, VOCs, pH.

Station 48+50 to Station 50+05 (19th Street), 0 to 75' RT and 0 to 125' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH and manganese.

Station 289+80 to Station 291+40 (I-74 EB), 0 to 85' RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH and manganese.

Station 291+40 to Station 292+85 (I-74 EB), 0 to 90' RT and 0 to 30' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH and manganese.

Station 292+85 to Station 293+95 (I-74 EB) 0 to 130' RT and 0 to 30' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 42+00 to Station 43+35 (19th Street), 0 to 75' RT and 0 to 35' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.



## 5 Conclusions and Recommendations

Station 43+35 to Station 45+05 (19th Street), 0 to 75' RT and 0 to 35' RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, benzo(a)pyrene.

Station 45+05 to Station 47+65 (19th Street), 0 to 100' RT and 0 to 60' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 87+30 to Station 89+40 (Ramp 7th-B), 0 to 85' RT and 0 to 50' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.

Station 89+40 to Station 92+90 (Ramp 7th-B), 0 to 45' RT and 0 to 75' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.

Station 55+50 to Station 56+50 (19th Street), 0 to 45' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH and manganese.

Station 311+00 to Station 312+75 (I-74 EB), 0 to 125' RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 1960+85 to Station 1962+60 (Coaltown Road), 0 to 35' RT and 0 to 35' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 1962+60 to Station 1964+70 (Coaltown Road), 0 to 35' RT and 0 to 35' LT, (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Station 1964+70 to Station 1966+65 (Coaltown Road), 0 to 35' RT and 0 to 35' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and pH.

Station 1966+65 to Station 1968+20 (Coaltown Road), 0 to 35' RT and 0 to 35' LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.

**5.2.2 ISGS #1314V3-66 (Scottish Rite Masonic Center)**

Station 39+05 to Station 40+35 (19th Street), 0 to 95' RT and 0 to 15' LT (Scottish Rite Masonic Center, PESA Site 1314V3-66, 1800 7th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.

**5.2.3 ISGS #1314V3-67 (Vacant Land)**

Station 77+50 to Station 79+10 (Ramp 7th-B), 0 to 75' RT (Vacant land, PESA Site 1314V3-67, 700 block of 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.

Station 80+25 to Station 81+60 (Ramp 7th-B), 0 to 65' RT (Vacant land, PESA Site 1314V3-67, 700 block of 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.

Station 81+60 to Station 82+95 (Ramp 7th-B), 0 to 60' RT (Vacant land, PESA Site 1314V3-67, 700 block of 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.

Station 82+95 to Station 84 +70 (Ramp 7th-B), 0 to 60' RT (Vacant land, PESA Site 1314V3-67, 700 block of 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.

Station 42+05 to Station 43+40 (19th Street), 35' to 100' LT (Vacant land, PESA Site 1314V3-67, 700 block of 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.

**5.2.4 ISGS #1314V3-74 (Residence)**

Station 54+40 to Station 55+50 (19th Street), 0 to 70' LT (Residence, PESA Site 1314V3-74, 1904 11th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

**5.2.5 ISGS #1314V3-75 (Residence)**

Station 1100+75 to Station 1101+45 (11th Street), 0 to 30' RT (Residence, PESA Site 1314V3-75, 1906 11th Avenue, Moline): This material meets the criteria of

Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, lead, manganese.

### **5.3 Recommendations**

#### **5.3.1 Additional Investigations**

E & E does not recommend further investigation for this project. Soil in the project area has been characterized with regard to IDOT construction activities. Additional sampling may be required if soil is encountered that exhibits odor or discoloration indicative of contamination during construction excavation activities in those areas, or if activities extend beyond the previously investigated area. Shallow groundwater was not encountered during the PSI. If groundwater exhibiting odor or discoloration is encountered during construction activities, the water should be sampled to determine proper management requirements.

#### **5.3.2 Prevention of Accelerated Contaminant Migration**

Soil containment and storm water runoff control measures are recommended to mitigate the migration of contaminants from any impacted soils that are stockpiled at the sites. If soil must be stockpiled, it should be stored in lined and covered roll-off boxes or segregated from other soils on storage pads designed to prevent migration of contaminants to unimpacted areas.

#### **5.3.3 Comparison of Detected Soil Concentrations with TACO Tier 1 Remediation Objectives for Construction Worker Exposure**

The COCs detected in site soil were also compared with TACO Tier 1 ROs for construction worker exposure. Lead and naphthalene were detected above the TACO Tier 1 RO for construction worker exposure at ISGS #1314V3-1 (IDOT ROW). The affected boring and detected COC concentrations are listed in Table 5-2. The remaining detected COC concentrations were below TACO Tier 1 ROs for construction worker exposure.

A VOC reading within background was detected at ISGS #1314V3-1 (IDOT ROW) in soil from boring 1314V3-01-B27, where lead and naphthalene were detected above TACO Tier 1 ROs for construction worker exposure. E & E recommends that air monitoring be conducted during excavation at the site. If soil unearthed during excavation activities exhibits PID readings, odors, or discoloration indicative of contamination, E & E recommends that the soil be sampled to determine appropriate worker protection measures during construction activities. The health and safety of construction workers are the sole responsibility of the construction contractor, and Occupational Safety and Health Administration (OSHA) regulations should be adhered to during construction activities.

**Table 5-1 Estimated Disposal Costs for Impacted Soil within IDOT Construction Areas  
General Cost Breakdown for Construction Activities  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Site	Pay Item/Cost per Unit								Total Cost (Rounded to nearest dollar)
	SPECIAL WASTE PLANS AND REPORTS <sup>a</sup> \$125,652.00 lump sum		NON-SPECIAL WASTE DISPOSAL <sup>b</sup> \$60.00 per cubic yard		NON-SPECIAL WASTE DISPOSAL <sup>c</sup> \$60.00 per cubic yard		SOIL DISPOSAL ANALYSIS <sup>d</sup> \$875.00 each		
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
ISGS #1314V3-1 (IDOT ROW)	1	\$101,940.00	8,288	\$497,280.00	17,007	\$1,020,420.00	1	\$875.00	\$1,620,515.00
ISGS #1314V3-66 (Scottish Rite Masonic Center)	1	\$4,256.00	0	\$0.00	874	\$52,440.00	1	\$875.00	\$57,571.00
ISGS #1314V3-67 (Vacant Land)	1	\$16,340.00	0	\$0.00	3,895	\$233,700.00	1	\$875.00	\$250,915.00
ISGS #1314V3-74 (Residence)	1	\$1,556.00	0	\$0.00	199	\$11,940.00	1	\$875.00	\$14,371.00
ISGS #1314V3-75 (Residence)	1	\$1,560.00	200	\$12,000.00	0	\$0.00	1	\$875.00	\$14,435.00

Notes:

<sup>a</sup> Special waste plans assume the following documents and costs are required - 1) Site health and safety plan at \$700; 2) Site contamination operation plan at \$700; 3) Erosion control plan at \$700; and 4) one final environmental construction report at \$1,700. The total cost for documents described (\$3,800) is apportioned equally between the five potential waste sites listed above and assumes the activities will occur during one mobilization. This line item also includes labor, expenses, and equipment for air monitoring field oversight for a time period of approximately 152 days at \$800 per day (\$121,852.00 total); and is based on an excavation and loading rate of approximately 200 yd<sup>3</sup> per day.

<sup>b</sup> Material must be managed to a non-special waste disposal facility. Transportation costs are based on a generic 100-mile distance facility and a truck capacity of 14 cubic yards.

<sup>c</sup> Although the disposal costs are estimated as a non-special waste, soil in this category includes soil that may be managed to a CCDD facility or USFO, or soil that may be managed as uncontaminated soil, but not at a CCDD facility or USFO due to pH.

<sup>d</sup> Disposal Analysis Methods: EPA Methods 1311, 8260B, 8270C, 8081, 8151A, 9045C, 1030, and 9095A.

**Table 5-2 Contaminants of Concern Above TACO Tier 1 Remediation Objectives  
for Construction Worker Exposure  
FAI 74 (Interstate 74), Contract 64E26  
Moline, Rock Island County, Illinois**

Site	Boring	Sample Depth Interval (feet)	Contaminant of Concern	Detected Concentration (mg/kg)	TACO Tier 1 Soil RO for Construction Worker Exposure	
					Ingestion (mg/kg)	Inhalation (mg/kg)
ISGS #1314V3-1 (IDOT ROW)	1314V3-01-27	0 - 8	Lead	1,600	700	--
		8 - 15	Naphthalene	15	1.8	--

Key:

mg/kg = Milligrams per kilogram.

RO = Remediation Objective.

TACO = Tiered Approach to Corrective Action Objectives.

# 6

## References

Ecology and Environment, Inc., (E & E), November 11, 2016, FINAL *Preliminary Site Investigation Work Plan, FAI 74 (Interstate 74), Moline, Rock Island County, Illinois*, prepared by Ecology and Environment, Inc., Chicago, Illinois.

Illinois State Geological Survey (ISGS), September 7, 2016, *Preliminary Environmental Site Assessment, FAI 74 (I-74), 23rd Avenue to Mississippi River, Moline, Rock Island County; Davenport East, Milan, Coal Valley, and Silvis quadrangles (USGS 7.5-minute topographic maps), T17N, R1W, Sections 4, 5, and 9; T18N, R1W, Sections 27, 29 and 32-34.*

# A

## ISGS PESA Excerpts

(Only the text portions of the PESA related to the E & E investigation sites are included in this appendix. Disregard any references in the text excerpts to PESA attachments, photographs, figures, and similar types of material, which have not been included in this appendix.)

**Site 1314V3-1 (1314-37, 1314V-2, 2708-66, 1314V2-1). ROW, mile markers 0 to 2. 5, Moline (I-74 from the Mississippi River to 29th Street; I-74 stations 22+00 IL (6748 +25 IA) RT and LT to 49+00 IL RT and LT; Attachment 2, pages 1-12).** This site is occupied by I-74 and its ROW. Natural gas pipeline markers were observed in the southeast and southwest corner of the I-74 and 27th Street intersection and near the intersection of 18th Avenue and 19th Street, indicating two pipelines pass through this site in east-west directions.

Sanborn maps from 1886 through 1906 did not have any coverage of this site. Sanborn maps from 1912 depicted residences and vacant land from 7th Avenue to 9th Avenue. The remainder of the site south of 9th Avenue was not covered. Aerial photographs from 1938 through 1964 depicted residences and vacant lots along the I-74 corridor south of 7th Avenue. Aerial photographs from 1938 through 1958 depicted a different two-lane bridge across the Mississippi River extending north from River Drive. Sanborn maps from 1950 through 1970 depicted residences and vacant lots from 7th Avenue to 9th Avenue and from 12th Avenue to 17th Avenue. The remainder of this site was not covered. Aerial photographs from 1964 depicted two different bridges extending from River Drive. Aerial photographs from 1970 depicted I-74 under construction. Aerial photographs from 1980 and later depicted I-74 with its current configuration.

The following bridges are present along I-74 in the project area, generally from north to south. Location references and construction dates are taken from the IDOT bridge information website. Where more than one year is present, the first year is the original construction date and later years are reconstruction dates. Map references are to Attachment 2. All of the bridges below were painted.

IDOT structure number	Location	Construction date	Map location, Attachment 2
S. N. 081-0142	I-74 approach structure over Mississippi River	1975	Page 1, 1a
S. N. 081-0143	I-74 approach structure over Mississippi River	1975	Page 1, 1b
S. N. 081-0111	I-74 S. B. off ramp over River Drive (1 km [0. 6 mi] south of Iowa line)	1974	Page 3, 1c
S. N. 081-0112	I-74 N. B. on ramp over River Drive (1 km [0. 6 mi] south of Iowa line)	1974	Page 3, 1d
S. N. 081-0113	I-74 S. B. off ramp over 6th Avenue (1. 3 km [0. 8 mi]) south of Iowa line)	1975	Page 5, 1e
S. N. 081-0114	I-74 N. B. on ramp over 6th Avenue (1. 3 km [0. 8 mi] south of Iowa line)	1975	Page 5, 1f
S. N. 081-0115	I-74 S. B. on ramp over 19th Street (1. 8 km [1. 1 mi] south of Iowa line)	1975	Page 8, 1g
S. N. 081-0099	I-74 S. B. over 19th Street (0. 8 km [0. 5 mi] north of 23rd Avenue)	1975	Page 8, 1h
S. N. 081-0100	I-74 N. B. over 19th Street (0. 8 km [0. 5 mi] north of 23rd Avenue)	1975	Page 8, 1i
S. N. 081-0116	I-74 N. B. off ramp over 19th Street (1. 8 km [1. 1 mi] south of Iowa line)	1975/2011	Page 8, 1j



S. N. 081-0101	I-74 S. B. over 12th Avenue (1. 1 km [0. 7 mi] north of 23rd Avenue)	1975	Page 8, 1k
S. N. 081-0102	I-74 N. B. over 12th Avenue (1. 1 km [0. 7 mi] north of 23rd Avenue)	1975	Page 8, 1l
S. N. 081-0103	I-74 N. B. over 19th Street (0. 3 km [0. 2 mi] north of 23rd Avenue)	1971	Page 9, 1m
S. N. 081-0104	I-74 S. B. over 19th Street (0. 3 km [0. 2 mi] north of 23rd Avenue)	1971	Page 9, 1n
S. N. 081-0105	23rd Avenue over I-74 (2. 4 km [1. 5 mil] south of IL 92)	1970	Page 10, 1o
S. N. 081-0107	27th Street over I-74 (0. 8 km [0. 5 mi] south of 23rd Avenue)	1971	Page 11, 1p
S. N. 081-0108	19th Street over I-74 (1 km [0. 6 mi] south of 23rd Avenue)	1971	Page 11, 1q

This site appears numerous times on multiple regulatory lists. Incidents will be discussed in geographic order below from north to south. Their locations are described below and shown on Attachment 2 where they are designated with a lower case letter. No evidence of spills was observed during fieldwork for this project, and the exact locations of the spills discussed in IEMA and ERNS records below are unknown.

Under the name "IDOT" and the address "Rock Island Co Bridge&hwy", this site appears on the BOL list (IEPA #1618995006). According to IEPA files, in May 1998, this site was registered by IDOT to generate between 100 kg/mo (220 lb/mo) and 1,000 kg/mo (2,200 lb/mo) of wastes containing lead from the maintenance of the I-74 approach structures over the Mississippi River (S. N. 081-0142 and S. N. 081-0143). No further information was available in IEPA files regarding IEPA #1618995006.

Under the name "Reynolds Service Corp" and the address "I-74 bridge/over Miss Rvr", this site appears on the IEMA non-LUST list (IEMA #982762). According to IEMA records, in November 1998, a release of 114 liters (30 gallons) of hydraulic oil was reported following a crane accident at this location. The general location of the release is depicted as Site 1314V3-1a on Attachment 2, page 1.

Site 1314V3-1r (Attachment 2, page 5). Sanborn maps from 1886 depicted a carpentry shop at the northwest corner of 6th Avenue and 20th Street.

Site 1314V3-1s (Attachment 2, page 6). City directories listed a photography studio at 612 20<sup>th</sup> Street in 1939.

Site 1314V3-1t (Attachment 2, page 8). Under the name "Molo Quint LLC" and the address "on the off ramp from westbound I-74 to 7th St", this site appears on the IEMA non-LUST list (IEMA #H-2009-1298). Under the name "Molo" and the address "Intersection of I-74 and 7th Street", this site appears on the ERNS list (ERNS #924335). According to IEMA records, a release of 1,893-liters (500-gallon) of diesel was reported from a semi-truck at this location in November 2009. According to ERNS records, a release of 757-liters (200-gallons) of diesel was reported at this location in November 2009.

Under the name "IDOT" and the address "Rock Island Co Bridge&hwy", this site appears on the BOL list (IEPA #1618995006). According to IEPA files, in May 1998, this site was registered by IDOT to generate between 100 kg/mo (220 lb/mo) and 1,000 kg/mo (2,200 lb/mo) of wastes containing lead from the maintenance of the I-74 overpasses at 19th Street (S. N. 081-0099, S. N. 081-0100, S. N. 081-0105, S.

N. 081-0115, and S. N. 081-0116). No further information was available in IEPA files regarding IEPA #1618995006.

Site 1314V3-1u (Attachment 2, page 10). During fieldwork for ISGS# 1314V in 2010, a temporary parking and construction materials storage area was observed north of 20th Avenue and east of 18th Street-C for construction materials. Equipment on the site included construction vehicles and two 1,136-liter (300-gallon) plastic ASTs with unknown contents. A mobile office was also present on site. The ASTs described above were not present during the fieldwork for this project.

Site 1314V3-1v (Attachment 2, page 11). Under the name "B&J Transportation" and the address "I-74 MM 2. 2", this site appears on the BOL list (IEPA #1610255105). Under the name "B&J Transportation" and the address "I-74 E MM 2. 5", this site appears on the BOL list (IEPA #1610453003). According to IEPA files, in August 2001, B&J Transportation registered with IEPA as a generator of an unspecified types and amounts of waste. No further information was found in IEPA files regarding IEPA #16102551015 and 1610453003.

Potential hazards associated with carpentry shops and the wood working industry include VOCs and metals. Potential hazards associated with photography businesses include VOCs and metals.

In soil gas taken from two previous boreholes completed at this site for ISGS #1314 in 2002 near Site 1314V3-1t, no VOCs were detected. See ISGS #1314 for details.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on May 10, 11, and July 21, 2016.

The following data gaps were identified at this site:

- The exact locations of the spills discussed in IEMA and ERNS records are unknown.
- The contents of the ASTs observed during fieldwork in 2010 are unknown.
- Evidence from aerial photographs and IDOT information indicates that these bridges have been present since before 1985, when lead paint was no longer used to paint bridges. These bridges are been painted. It is unknown if lead paint is present at these structures.

The structure on this site is painted and may contain friable asbestos-containing materials as a compound of painting or patching compounds. Evidence from aerial photographs and IDOT information indicates that these bridges have been present since before 1985, when lead paint was no longer used to paint bridges. These bridges are been painted. It is unknown if lead paint is present at these structures.

The following RECs were identified at this site: Spills; former ASTs; evidence of chemical use.

The following de minimis conditions were identified at this site: Natural gas pipeline; potential ACM.

**Site 1314V3-66 (1314-34, 1314-Z, 1314V-27, 1314V2-64). Scottish Rite Masonic Center, 1800 7th Avenue, Moline (southwest corner of 7th Avenue and 19th Street; approximate 7th Avenue station 7008+00 RT; Attachment 2, page 7).** This site is occupied by a cathedral and parking lot for a fraternal organization. Two pole-mounted transformers were observed along the south side of the cathedral and one pad-mounted transformer was observed along the west side of the cathedral. This site did not appear on any of the regulatory lists checked for this project.

On the 1898 and 1906 Sanborn maps, a residence was depicted along the west side of this site. The date of first development is unknown. Sanborn maps from 1912 depicted two residences with a gasoline UST depicted approximately 88 m (290 ft) west of 19th Street and 76 m (250 ft) south of 7th Avenue. The status of this UST is unknown. Aerial photographs from 1938 depicted the cathedral with a residence on

the east side. On the 1951 through 1973 aerial photographs, a cathedral and a commercial building was shown. The 1950 through 1970 Sanborn maps depicted the same buildings, labeled a cathedral on the west side and an automobile sales and service business on the east side. Aerial photographs from 1980 and later depicted the current cathedral and parking lot. City directories from 1891 through 1925 listed individual names in the historic address range for this site. City directories from 1932 through 2014 listed a cathedral and masonic temple. City directories from 1953 through 1965 listed an automobile dealership in the historic address range for this site.

The following information has been modified from ISGS #1314:

A magnetometer survey was conducted in July 2002, along the ROW of 7th Avenue and 19th Street. Two magnetic anomalies were detected. One was centered on a point approximately 15 m (49 ft) west of 19th Street and 50 m (164 ft) south of 7th Avenue. The second anomaly was centered on a point approximately 23 m (75 ft) west of 19th Street and 30 m (98 ft) south of 7th Avenue.

No information was available from the Moline Fire Department concerning USTs at this site.

In one of three boreholes completed at this site for ISGS #1314 in 2002, VOCs were detected. See ISGS #1314 for details.

Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented USTs.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on May 10, 11, and July 21, 2016.

The following data gap was identified at this site:

- The date of first development is unknown.
- The status of the UST depicted on Sanborn maps is unknown.
- The status and location of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); potential chemical use; VOCs detected in previous ISGS testing.

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

**Site 1314V3-67 (1314-35, 1314V-28, 1314V2-65). Vacant land, 700 block of 19th Street, Moline (southeast corner of 19th Street and 7th Avenue, approximate station 705+00 LT of 7th Avenue; Attachment 2, page 7).** This site is occupied by vacant grassy land. This site did not appear on any of the regulatory lists checked for this project.

On the 1912 Sanborn map, several residences were depicted at this site. The date of first development is unknown. Aerial photographs from 1938 depicted vacant wooded land. On the 1950 Sanborn map, and the 1951 aerial photograph, residences and a church were present at this location. On the 1957 through

1970 Sanborn maps, and the 1958 through 1970 aerial photographs, residences and a gasoline station were present; the station was present on the northwest corner of 19th Street and 7th Avenue. No USTs were depicted on Sanborn maps. Aerial photographs from 1980 and later depicted vacant land with a grassy appearance. In the 1891 through 1911 city directories, no listings were found of this location. City directories from 1917 through 1958 listed a church and individual names in the historical address range for this site. City directories from 1958 through 1977 listed a gasoline station and individual names at 702 19th Street, which would be a historical address for this site. In the 1982 through 2014 city directories, no listings were found.

No information was available from the Moline Fire Department concerning USTs at this site.

The following information has been modified from ISGS #1314.

A magnetometer survey was conducted in July 2002. Five magnetic anomalies were detected. One, located in the southeast quadrant of the intersection, was centered on a point approximately 10.5 m (34 ft) east of 19th Street and 11 m (36 ft) south 7th Avenue. The second anomaly, located southeast of the first, was centered on a point approximately 18 m (59 ft) east of 19th Street and 11 m (36 ft) south of 7th Avenue. The third anomaly was centered on a point approximately 23 m (75 ft) east of 19th Street and 30 m (98 ft) south of 7th Avenue. The fourth anomaly was centered on a point approximately 28 m (92 ft) east of 19th Street and 22 m (72 ft) south of 7th Avenue. The fifth anomaly was centered on a point approximately 42 m (138 ft) east of 19th Street and 11 m (36 ft) south of 7th Avenue.

In one of two boreholes completed at this site for ISGS #1314 in 2002, VOCs were detected. See ISGS #1314 for details.

Historic gas stations commonly conducted auto repairs on the premises. Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on May 10, 11, and July 21, 2016.

The following data gaps were identified at this site:

- The date of first development is unknown.
- The status and location of any undocumented UST(s) at this site are unknown.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following RECs were identified at this site: Potential UST(s); potential former chemical use; VOCs detected in previous ISGS testing.

No de minimis conditions were identified at this site.

**Site1314V3-74 (1314-36, 1314V-33, 1314V2-70). Residence, 1904 11th Avenue, Moline (southeast corner of 11th Avenue and 19th Street; no stationing provided; Attachment 2, page 8).** This site is occupied by a single-family residence.

During fieldwork for ISGS #1314V2 in 2013, a 208-liter (55-gallon) drum was observed at this site. The contents of the drum were unknown. No evidence of this drum was observed during fieldwork for this project.

On the 1938 and later aerial photographs, and on the 1950 through 1970 Sanborn maps, the current residence was present. The date of first development is unknown.

Under the name "IEPA" and the address "1904 11th Ave A", this site appears on the BOL list (IEPA #1610453002). Under the name "Unknown" and the address "1904 11th Ave A", this site appears on the IEMA non-LUST list (IEMA #961334). According to IEPA files, on July 25, 1996, IEMA was notified of a lead paint release due to illegal sandblasting. Lead-based paint was reportedly removed from the roof, gutters, windows, doors, porch, sidewalks, and soil at this residence following sand blasting activities. In July 1996, an IEPA inspector observed paint chips across the yard along the north, east, and west sides of this residence and along the north and west sides of the residence at 1906 11th Avenue A (Site 1314V3-73). The paint waste was removed from both properties by Clean Harbors Environmental Services Inc., and transported to a landfill. No further information was present in IEPA files regarding IEPA #1610453002.

In a soil sample taken from this site for PESA #1314, no metals were detected. See PESA #1314 for details.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on May 10, 11, and July 21, 2016.

The following data gaps were identified at this site:

- The contents of the former drum are unknown.
- The date of first development is unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in this building.

The following RECs were identified at this site: Former drum; evidence of chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

**Site 1314V3-75 (1314V-34, 1314V2-71). Residence, 1906 11th Avenue, Moline (southeast corner of 11th Avenue and 19th Street; no stationing provided; Attachment 2, page 8).** This site is occupied by a single-family residence.

On the 1938 and later aerial photographs, and on the 1950 through 1970 Sanborn maps, the current residence was present. The date of first development is unknown.

Information in IEPA #1610453002 (Site 1314V3-74), pertained to this site. In July 1996, the residence at Site 1314V3-74 was inspected by the IEPA after a complaint was received regarding the sandblasting of lead-based paint. The IEPA inspector observed paint chips in the lawn along the north and west sides of this residence. The paint waste was removed from the both site by Clean Harbors Environmental Services Inc., and transported to a landfill. See Site 1314V3-74 for details.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on May 10, 11, and July 21, 2016.

The following data gap was identified at this site:

- The date of first development is unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in this building.

The following REC was identified at this site: Evidence of chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

# B

## Boring Logs



# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B12

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **11 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50644354690; W90.50797685030**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">Feet</div> </div>		<p>TOPSOIL: Dark brown, stiff, dry.</p> <hr/> <p>CLAY: Brown, with trace pebbles, medium to stiff, moist.</p> <hr/> <p>CLAY: Brown, medium to stiff, moist.</p> <hr/> <p>SILTY CLAY: Light brown, soft, moist.</p>	<p>100</p> <hr/> <p>75</p> <hr/> <p>100</p>	<p>0.0</p> <hr/> <p>0.0</p> <hr/> <p>0.0</p> <hr/> <p>0.0</p>	<p>0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p> <hr/> <p>6- to 11-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p>



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B13

PROJECT: FAI 74 (I-74)

SITE LOCATION: Moline, Rock Island County, IL

SITE NAME: ISGS #1314V3-1, IDOT ROW

JOB NUMBER: 1009008.0046.01

GEOLOGIST: M. Fischer

LOCATION: N41.50630792740; W90.50812009730

EQUIPMENT: E & E Geoprobe 5410

OPERATOR: T. Pachowicz

SAMPLING METHOD: Macro Core

DATE DRILLED: 11/29/16

TOTAL DEPTH: 5 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 5 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CLAY: Dark brown, hard, dry.		0.0	0 to 5-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		SAND: Medium-coarse, brown, stiff, moist.	100	0.0	
-5				0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B14

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW  
  
 JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50604662190; W90.50787970430

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/29/16  
 TOTAL DEPTH: 12 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.  
 Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS	
0		TOPSOIL: Dark brown, stiff, dry.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.	
-		CLAY: Brown, with trace fine sand, stiff, dry.				
-5		CLAY: Gray, stiff, dry.	100	0.0		
-		CLAY: Same as above, but black.				
-		CLAY: Same as above.	100	0.0		6- to 12-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
-10		SAND: Brown, fine, stiff, moist.				
-		CLAY: Black, hard, dry.	100	0.0		
-						



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B15

PROJECT: FAI 74 (I-74)

SITE LOCATION: Moline, Rock Island County, IL

SITE NAME: ISGS #1314V3-1, IDOT ROW

JOB NUMBER: 1009008.0046.01

GEOLOGIST: M. Fischer

LOCATION: N41.50555523260; W90.50788590780

EQUIPMENT: E & E Geoprobe 5410

OPERATOR: T. Pachowicz

SAMPLING METHOD: Macro Core

DATE DRILLED: 11/29/16

TOTAL DEPTH: 13 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CONCRETE	100	0.0	0 to 7-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, very stiff, moist..			
-5		CLAY: Gray, hard, dry.	100	0.0	
				0.0	

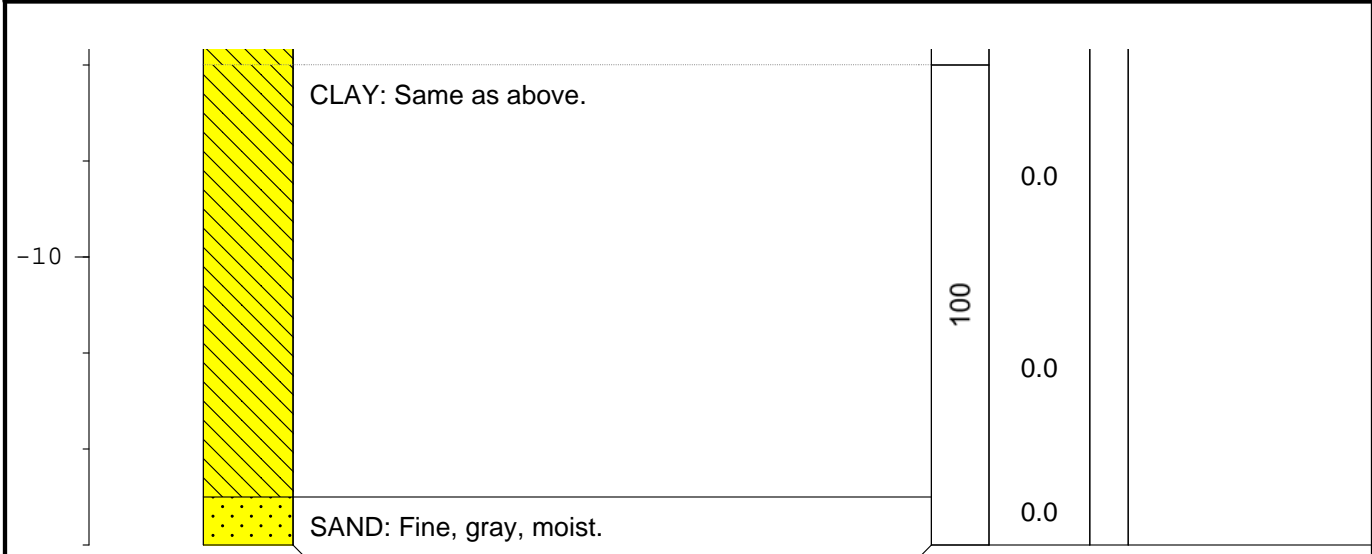


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DEPTH	GRAPHIC LOG	Geoprobe Boring Log Number: 1314V3-01-B15 SOIL DESCRIPTION (CONT.)	REC. (%)	PID METER UNITS	SOIL INTERVAL COLLECTED FOR LABORATORY ANALYSIS
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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-01-B16**

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **6 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50516719250; W90.50788004040**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CONCRETE			0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, very stiff, dry.	100	0.0	
		CLAY: Same as above, but gray.		0.0	
-5		CLAY: Same as above.	100	0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B17

PROJECT: FAI 74 (I-74)

SITE LOCATION: Moline, Rock Island County, IL

SITE NAME: ISGS #1314V3-1, IDOT ROW

JOB NUMBER: 1009008.0046.01

GEOLOGIST: M. Fischer

LOCATION: N41.50463334960; W90.50790979620

EQUIPMENT: E & E Geoprobe 5410

OPERATOR: T. Pachowicz

SAMPLING METHOD: Macro Core

DATE DRILLED: 11/29/16

TOTAL DEPTH: 7 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CONCRETE	100	0.0	0 to 7-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, very stiff, dry.			
		CLAY: Gray, very stiff, dry.			
-5		CLAY: Same as above.	100	0.0	
				0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B18

PROJECT: FAI 74 (I-74)

SITE LOCATION: Moline, Rock Island County, IL

SITE NAME: ISGS #1314V3-1, IDOT ROW

JOB NUMBER: 1009008.0046.01

GEOLOGIST: M. Fischer

LOCATION: N41.50411145020; W90.50795002840

EQUIPMENT: E & E Geoprobe 5410

OPERATOR: T. Pachowicz

SAMPLING METHOD: Macro Core

DATE DRILLED: 11/29/16

TOTAL DEPTH: 7 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CONCRETE	100	0.0	0 to 7-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, stiff, dry.			
-5		CLAY: Same as above, but gray.	100	0.0	
				0.0	



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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-01-B19**

PROJECT: **FAI 74 (I-74)**

SITE LOCATION: **Moline, Rock Island County, IL**

SITE NAME: **ISGS #1314V3-1, IDOT ROW**

JOB NUMBER: **1009008.0046.01**

GEOLOGIST: **M. Fischer**

LOCATION: **N41.50361117600; W90.50790359320**

EQUIPMENT: **E & E Geoprobe 5410**

OPERATOR: **T. Pachowicz**

SAMPLING METHOD: **Macro Core**

DATE DRILLED: **11/29/16**

TOTAL DEPTH: **5 feet**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 5 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, stiff, dry.			0 to 5-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, stiff, with trace gravel, dry.	100	0.0	
				0.0	
				0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B20

PROJECT: FAI 74 (I-74)

SITE LOCATION: Moline, Rock Island County, IL

SITE NAME: ISGS #1314V3-1, IDOT ROW

JOB NUMBER: 1009008.0046.01

GEOLOGIST: M. Fischer

LOCATION: N41.50307569850; W90.50796570360

EQUIPMENT: E & E Geoprobe 5410

OPERATOR: T. Pachowicz

SAMPLING METHOD: Macro Core

DATE DRILLED: 12/1/16

TOTAL DEPTH: 6 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Black, stiff, dry.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, hard, dry.			
-5		CLAY: Same as above.	100	0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B21

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: Stainless Steel Hand Auger  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Hand Auger  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 6 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50248561220; W90.50796553600

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CLAY: Brown, stiff, moist.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
					0.0
-5					0.0



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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-01-B22**

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **7 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50607700580; W90.50853751550**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CLAY: Brown, hard, dry.	100	0.0	0 to 7-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Same as above, but black.			
			100	0.0	
-5		CLAY: Gray, medium to stiff, moist.			



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B23

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 8 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50563578250; W90.50849007480

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CLAY: Light brown, stiff, dry.	100	0.0	0 to 8-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
				0.0	
-5	CLAY: Same as above, but gray.	100	0.0		
			0.0		



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B24

PROJECT: FAI 74 (I-74)

SITE LOCATION: Moline, Rock Island County, IL

SITE NAME: ISGS #1314V3-1, IDOT ROW

JOB NUMBER: 1009008.0046.01

GEOLOGIST: M. Fischer

LOCATION: N41.50530712860; W90.50847674690

EQUIPMENT: E & E Geoprobe 5410

OPERATOR: T. Pachowicz

SAMPLING METHOD: Macro Core

DATE DRILLED: 11/30/16

TOTAL DEPTH: 4.5 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CLAY: Brown, with trace small gravel, hard, dry.	100	0.0	0 to 4.5-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
-5		CLAY: Same as above, refusal at 4.5 feet.	100	0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B25

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

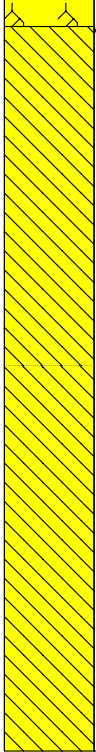
EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 8.2 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50485362570; W90.50856048320

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, medium to stiff, moist.	100	0.0	0 to 8.2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Stiff, with trace small gravel, dry.			
-5		CLAY: Same as above, refusal at 8.2 feet.	100	0.0	
				0.0	



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## Geoprobe Boring Log Number: 1314V3-01-B26

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: Stainless Steel Hand Auger  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Hand Auger  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 2 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50449982530; W90.50848999080

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0 Feet -5		CLAY: Brown, stiff, dry, refusal at 2.0 feet.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.



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## Geoprobe Boring Log Number: 1314V3-01-B27

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 12/2/16  
 TOTAL DEPTH: 22 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50416966220; W90.50853299050

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		FILL: Concrete.	100	0.0	0 to 8-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		FILL: Sand, brown, loose, dry.			
		CLAY: Brown, stiff, dry, with medium gravel.			
-5		CLAY: Brown, soft, moist, with fine sand, brown.	50	0.0	
		FILL: Black clay, moist, black slag, coarse, brown sand, slight odor.	50	0.2	
-10	CLAY: Brown, stiff, dry, trace pebbles.				



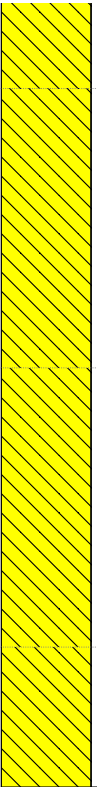
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DEPTH	GRAPHIC LOG	Geoprobe Boring Log Number: 1314V3-01-B27 SOIL DESCRIPTION (CONT.)	REC. (%)	PID METER UNITS	SOIL INTERVAL COLLECTED FOR LABORATORY ANALYSIS
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				0.0	
-15		CLAY: Same as above, but grayish brown and hard.	100	0.0	
		CLAY: Same as above.	100	0.0	15- to 22-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
-20		CLAY: Same as above.	100	0.0	



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**Geoprobe Boring Log Number: 1314V3-01-B28**

PROJECT: **FAI 74 (I-74)**

SITE LOCATION: **Moline, Rock Island County, IL**

SITE NAME: **ISGS #1314V3-1, IDOT ROW**

JOB NUMBER: **1009008.0046.01**

GEOLOGIST: **M. Fischer**

LOCATION: **N41.50361754610; W90.50831087000**

EQUIPMENT: **E & E Geoprobe 5410**

OPERATOR: **T. Pachowicz**

SAMPLING METHOD: **Macro Core**

DATE DRILLED: **12/2/16**

TOTAL DEPTH: **4.5 feet**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CONCRETE			
		FILL: Sand, medium fine, brown, loose, dry. CLAY: Brown, stiff, dry.		0.0	0 to 4.5-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		FILL: Medium gravel, loose, dry.	75	0.0	
		FILL: Same as above, refusal at 4.5 feet.		0.0	
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B29

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: Stainless Steel Hand Auger  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Hand Auger  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 5 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50294297130; W90.50842327090

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, loose, moist.	100	0.0	0 to 5-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, medium to stiff, moist.			
-5		CLAY: Same as above.	100	0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B30

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **12/1/16**  
 TOTAL DEPTH: **6 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50266661960; W90.50837415370**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 5px;">Feet</div> <div style="margin-left: 5px;"> <div style="text-align: center; margin-bottom: 10px;">0</div> <div style="text-align: center; margin-top: 10px;">-5</div> </div> </div>		<p>TOPSOIL: Dark brown, medium to stiff, moist.</p> <hr/> <p>CLAY: Grayish brown, stiff, moist, with trace pebbles.</p>	100	0.0  0.0  0.0	<p>0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p>



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B31

PROJECT: FAI 74 (I-74)  
SITE LOCATION: Moline, Rock Island County, IL  
SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: Stainless Steel Hand Auger  
OPERATOR: T. Pachowicz  
SAMPLING METHOD: Hand Auger  
DATE DRILLED: 12/1/16  
TOTAL DEPTH: 6 feet

JOB NUMBER: 1009008.0046.01  
GEOLOGIST: M. Fischer  
LOCATION: N41.50221382910; W90.50834565420

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, medium to stiff, moist.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Grayish brown, stiff, moist, with trace pebbles.			
-5					



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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-01-B32**

PROJECT: **FAI 74 (I-74)**

SITE LOCATION: **Moline, Rock Island County, IL**

SITE NAME: **ISGS #1314V3-1, IDOT ROW**

JOB NUMBER: **1009008.0046.01**

GEOLOGIST: **M. Fischer**

LOCATION: **N41.50511958330; W90.50933555670**

EQUIPMENT: **E & E Geoprobe 5410**

OPERATOR: **T. Pachowicz**

SAMPLING METHOD: **Macro Core**

DATE DRILLED: **11/30/16**

TOTAL DEPTH: **6 feet**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
		CLAY: Brown, medium to stiff, dry.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, with trace small gravel, hard, dry.			
		CLAY: Same as above.	100	0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B33

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW  
 JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50481171650; W90.50913875010

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 2.5 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">Feet</div> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; width: 20px; height: 100px; position: relative;"> <span style="position: absolute; top: 0; left: 0; right: 0;">0</span> <span style="position: absolute; bottom: 0; left: 0; right: 0;">-5</span> </div> </div>		<p>TOPSOIL: Dark brown, loose, moist.</p> <hr/> <p>CLAY: Brown, with trace small gravel, medium to stiff, moist, refusal at 2.5 feet.</p>	50	0.0  0.0	<p>0 to 2.5-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p>



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B34

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**  
 JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50429539100; W90.50895376180**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **12/5/16**  
 TOTAL DEPTH: **20 feet**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 5 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); border: 1px solid black; padding: 2px;">Feet</div> <div style="margin-left: 10px;"> <p>0</p> <p style="text-align: center;">-5</p> </div> </div>		<p>FILL: Brown clay and medium gravel, hard, dry.</p> <hr/> <p>FILL: Same as above.</p> <hr/> <p>CLAY: Grayish brown, soft, moist.</p>	<p>100</p> <hr/> <p>50</p>	<p>0.0</p> <hr/> <p>0.0</p> <hr/> <p>0.0</p> <hr/> <p>0.0</p>	<p>0 to 7-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p> <hr/> <p>7- to 14-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p>


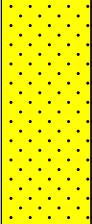




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DEPTH	GRAPHIC LOG	Geoprobe Boring Log Number: 1314V3-01-B34 SOIL DESCRIPTION (CONT.)	REC. (%)	PID METER UNITS	SOIL INTERVAL COLLECTED FOR LABORATORY ANALYSIS
-10		CLAY: Same as above.			
		SAND: Coarse, brown, dense, moist, with small gravel.	60	0.0	
		CLAY: Brown, stiff, moist.		0.0	
-15		CLAY: Same as above, but gray.	100	0.0	14- to 20-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
-20				0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B35

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW  
 JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50342954090; W90.50857121150

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 12/2/16  
 TOTAL DEPTH: 20 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.  
 Soil headspace readings conducted at 2-foot intervals.

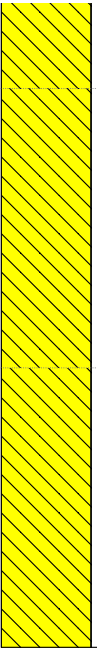
DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); border: 1px solid black; padding: 2px;">Feet</div> <div style="margin-left: 10px;"> <p>0</p> <p>-5</p> <p>-10</p> </div> </div>		<p>FILL: Concrete.</p> <hr/> <p>CLAY: Brown, medium to stiff, dry.</p> <hr/> <p>CLAY: Black, hard, dry.</p> <hr/> <p>CLAY: Black, medium to stiff, with trace fine sand, moist.</p>	<p>100</p> <hr/> <p>100</p> <hr/> <p>100</p>	<p>0.0</p> <hr/> <p>0.0</p> <hr/> <p>0.0</p> <hr/> <p>0.0</p>	<p>0 to 7-foot depth interval soil sample and duplicate soil sample were collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p> <hr/> <p>7- to 14-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.</p>



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DEPTH	GRAPHIC LOG	Geoprobe Boring Log Number: 1314V3-01-B35 SOIL DESCRIPTION (CONT.)	REC. (%)	PID METER UNITS	SOIL INTERVAL COLLECTED FOR LABORATORY ANALYSIS
-15		CLAY: Brown, hard, and dry.	100	0.0	14- to 20-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
-20		CLAY: Gray, with trace pebbles, hard, dry.	100	0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B36

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**  
 JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50311333360; W90.50876718060**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **12/8/16**  
 TOTAL DEPTH: **28 feet**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.  
 Soil headspace readings conducted at 2-foot intervals.

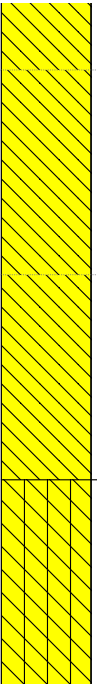
DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0 Feet -5 -10		TOPSOIL: Black, soft, dry. CLAY: Brown, with trace small gravel, hard, dry. CLAY: Same as above, but brown and black. CLAY: Same as above. CLAY: Same as above, but black. CLAY: Greenish brown, hard, dry.	100 100 60 75	0.0 0.0 0.0 0.0 0.0	0 to 8-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses. 8- to 16-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.



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DEPTH	GRAPHIC LOG	Geoprobe Boring Log Number: 1314V3-01-B36 SOIL DESCRIPTION (CONT.)	REC. (%)	PID METER UNITS	SOIL INTERVAL COLLECTED FOR LABORATORY ANALYSIS
-15		CLAY: Same as above, but brown.		0.0	16- to 24-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
-20		CLAY: Same as above, with trace fine sand.	100	0.0	
-25		SILTY CLAY: Brown, medium to stiff, moist, refusal at 28 feet due to cave in.	100	0.0	24- to 28-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.



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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-01-B37**

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **2 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50195579280; W90.50700664660**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, dry.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Light brown, stiff, dry.			
-5					



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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-01-B38**

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **11/30/16**  
 TOTAL DEPTH: **4 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.49744377290; W90.50722507900**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		FILL: Medium gravel, loose, dry.	100	0.0	0 to 4-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
Feet		CLAY: Light brown, medium to stiff, dry.			
-5		CLAY: Same as above.			



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B39

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **11/30/16**  
 TOTAL DEPTH: **4 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.49672230100; W90.50721309320**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		FILL: Medium gravel, loose, dry.	100	0.0	0 to 4-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Light brown, medium to stiff, moist.			
		CLAY: Same as above.	100	0.0	
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B40

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: Stainless Steel Hand Auger  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Hand Auger  
 DATE DRILLED: 11/29/16  
 TOTAL DEPTH: 2 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.49352095900; W90.50524703470

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, dry.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Dark brown, medium to stiff, dry.			
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B41

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-1, IDOT ROW

EQUIPMENT: Stainless Steel Hand Auger  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Hand Auger  
 DATE DRILLED: 11/29/16  
 TOTAL DEPTH: 2 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.49293858420; W90.50484344680

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, dry.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, medium to stiff, dry.			
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B42

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **2 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.49253684000; W90.50449501050**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, dry.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, medium to stiff, dry.			
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-01-B43

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-1, IDOT ROW**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **2 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.49202847730; W90.50413676880**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, dry.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, medium to stiff, dry.			
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-66-B01

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-66,  
 Scottish Rite Masonic Center  
 JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50590505140; W90.50982665220

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 7 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, medium to stiff, moist.	75	0.0	0 to 7-foot depth interval soil sample and duplicate soil sample were collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Brown, medium to stiff, moist.			
-5		SILTY CLAY: Light brown, soft, moist.	100	0.0	
				0.0	



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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-66-B02**

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-66,  
 Scottish Rite Masonic Center  
 JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50549127860; W90.50953982400

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 6 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0 Feet -5		TOPSOIL: Dark brown, medium to stiff, moist.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Dark brown, medium to stiff, moist.			
		CLAY: Same as above.	100	0.0	



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## Geoprobe Boring Log Number: 1314V3-67-B01

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-67, Vacant Land**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **11/30/16**  
 TOTAL DEPTH: **9 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50628470960; W90.50890430780**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0 Feet -5		TOPSOIL: Dark brown, medium to stiff, moist.  CLAY: Grayish brown, stiff, dry, with trace small gravel.    CLAY: Same as above, but moist.	100    50	0.0    0.0	0 to 5-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.    5- to 9-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		SILTY CLAY: Light brown, soft, moist.	100	0.0	



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**Geoprobe Boring Log Number: 1314V3-67-B02**

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-67, Vacant Land**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **11/30/16**  
 TOTAL DEPTH: **6 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50599645640; W90.50885485460**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, medium to stiff, moist.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Grayish brown, stiff, moist, trace fine sand.			
-5	CLAY: Same as above.	100	0.0		



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-67-B03

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-67, Vacant Land**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **11/30/16**  
 TOTAL DEPTH: **9 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50565795330; W90.50883323000**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0 Feet -5		<p>TOPSOIL: Dark brown, stiff, dry.</p> <p>CLAY: Brown, very stiff, dry, with trace gravel.</p>	100	0.0	0 to 4-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		<p>NO RECOVERY: Stuck sample liner.</p>	NR	NR	
			NR	NR	
			NR	NR	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-67-B04

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-67, Vacant Land

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 13 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50525537040; W90.50880674300

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.  
 Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0 Feet -5 -10		CLAY: Brown, with trace small gravel, stiff, dry.  CLAY: Same as above.  CLAY: Same as above, but becomes grayish brown, medium to stiff, moist.	100  100  100	0.0  0.0  0.0  0.0	0 to 7-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.  7- to 13-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-67-B05

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-67, Vacant Land

EQUIPMENT: Stainless Steel Hand Auger  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Hand Auger  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 6 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50495492120; W90.50876231840

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		CLAY: Brown, medium to stiff, dry, with trace gravel.	100	0.0	0 to 6-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
				0.0	
-5				0.0	



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# Illinois Department of Transportation

**Geoprobe Boring Log Number: 1314V3-67-B06**

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-67, Vacant Land**

EQUIPMENT: **E & E Geoprobe 5410**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Macro Core**  
 DATE DRILLED: **11/30/16**  
 TOTAL DEPTH: **4 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50527347520; W90.50904160390**

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, stiff, dry.	100	0.0	0 to 4-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Dark brown, very stiff, dry, with trace gravel.			
-5				0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-67-B07

PROJECT: FAI 74 (I-74)  
 SITE LOCATION: Moline, Rock Island County, IL  
 SITE NAME: ISGS #1314V3-67, Vacant Land

EQUIPMENT: E & E Geoprobe 5410  
 OPERATOR: T. Pachowicz  
 SAMPLING METHOD: Macro Core  
 DATE DRILLED: 11/30/16  
 TOTAL DEPTH: 4 feet

JOB NUMBER: 1009008.0046.01  
 GEOLOGIST: M. Fischer  
 LOCATION: N41.50554416820; W90.50917873170

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, stiff, moist.	100	0.0	0 to 4-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Dark brown, hard, dry.		0.0	
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-67-B08

PROJECT: FAI 74 (I-74)  
SITE LOCATION: Moline, Rock Island County, IL  
SITE NAME: ISGS #1314V3-67, Vacant Land  
  
JOB NUMBER: 1009008.0046.01  
GEOLOGIST: M. Fischer  
LOCATION: N41.50608924340; W90.50954116510

EQUIPMENT: E & E Geoprobe 5410  
OPERATOR: T. Pachowicz  
SAMPLING METHOD: Macro Core  
DATE DRILLED: 11/30/16  
TOTAL DEPTH: 4 feet

∇ Water level during drilling, if encountered

Boring continuously sampled using a 2-inch diameter sampler, 4 feet in length.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, stiff, moist. CLAY: Brown, stiff, dry.	100	0.0	0 to 4-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
-5				0.0	



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-74-B01

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-74, Residence**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **2 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50217175210; W90.50720563300**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, dry.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Light brown, stiff, dry, with trace pebbles.			
-5					



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# Illinois Department of Transportation

## Geoprobe Boring Log Number: 1314V3-75-B01

PROJECT: **FAI 74 (I-74)**  
 SITE LOCATION: **Moline, Rock Island County, IL**  
 SITE NAME: **ISGS #1314V3-75, Residence**

EQUIPMENT: **Stainless Steel Hand Auger**  
 OPERATOR: **T. Pachowicz**  
 SAMPLING METHOD: **Hand Auger**  
 DATE DRILLED: **11/29/16**  
 TOTAL DEPTH: **2 feet**

JOB NUMBER: **1009008.0046.01**  
 GEOLOGIST: **M. Fischer**  
 LOCATION: **N41.50235133430; W90.50698896050**

∇ Water level during drilling, if encountered

Boring continuously sampled using a hand auger.

Soil headspace readings conducted at 2-foot intervals.

DEPTH	GRAPHIC LOG	SOIL DESCRIPTION	REC. (%)	PID Meter Units	SOIL INTERVAL COLLECTED FOR LABORATORY CHEMICAL ANALYSIS
0		TOPSOIL: Dark brown, dry.	100	0.0	0 to 2-foot depth interval soil sample collected for VOC, SVOC, total TAL metals, TCLP/SPLP TAL metals, pH, and percent solids analyses.
		CLAY: Light brown, stiff, with trace pebbles, dry.			
-5					



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# C



## Summary of Analytical Results

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

**Key to Data Tables**

- MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
- mg/kg = Milligrams per kilogram.
- mg/L = Milligrams per liter.
- MSA = Metropolitan Statistical Area
- TACO = Tiered Approach to Corrective Action Objectives
- TCLP = Toxicity Characteristic Leaching Procedure.
- SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
- SPLP = Synthetic Precipitation Leaching Procedure.
- ND = Not detected.
- NA = Not analyzed.
- J = Estimated value.
- U = Analyte was analyzed for but not detected.

**Criteria Qualifiers and Shading**

- # = pH is less than 6.25 or greater than 9.0 standard units.
- † = Concentration exceeds the most stringent MAC.
- m = Concentration exceeds the MAC for an MSA.
- \* = Concentration exceeds the MAC for Chicago corporate limits.
- c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
- L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
-  = Concentration exceeds the most stringent MAC, but is below the MAC for an MSA.
-  = Concentration exceeds applicable comparison criteria.

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

SITE	ISGS #1314V3-1 (ROW)					Comparison Criteria					
	1314V3-01-B12		1314V3-01-B13	1314V3-01-B14		MACs			TACO		
SAMPLE	1314V3-01-B12 (0-6)	1314V3-01-B12 (6-11)	1314V3-01-B13 (0-5)	1314V3-01-B14 (0-6)	1314V3-01-B14 (6-12)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-11	0-5	0-6	6-12						
pH	8.8	8.1	9.1 #	8.2	7.8						
<b>VOCs (mg/kg)</b>											
Acetone	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>											
2-Methylnaphthalene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	ND U	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	0.0075 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	ND U	ND U	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	ND U	0.0066 J	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	ND U	0.007 J	ND U	ND U	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>											
Antimony	ND U	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	3.3	5.4	2.1	3.3	3.1	11.3	13	--	13	61	--
Barium	53	74	30	69	220	1,500	--	--	5,500	14,000	--
Beryllium	0.36	0.46	0.25	0.59	0.72	22	--	--	160	410	--
Boron	1.4 J	1.6 J	1.5 J	1.2 J	1.8 J	40	--	--	16,000	41,000	--
Cadmium	0.18	0.25	0.061 J	0.078 J	0.17	5.2	--	--	78	200	--
Calcium	14,000	6,000	8,000	2,700	3,900	--	--	--	--	--	--
Chromium	8.3	11	9.5	16	13	21	--	--	230	690	--
Cobalt	5.9	7.6	4.1	8.3	6.1	20	--	--	4,700	12,000	--
Copper	7.3	11	5.1	16	11	2,900	--	--	2,900	8,200	--
Iron	9,500	13,000	7,400	16,000 †m	12,000	15,000	15,900	--	--	--	--
Lead	8.2	8.5	6.4	9.4	10	107	--	--	400	700	--
Magnesium	3,300	4,100	4,000	3,100	2,300	325,000	--	--	--	730,000	--
Manganese	450	510	180	250	220	630	636	--	1,600	4,100	--
Mercury	0.015 J	0.023	0.028	0.042	0.013 J	0.89	--	--	10	0.1	--
Nickel	14	20	8.8	22	14	100	--	--	1,600	4,100	--
Potassium	560	690	350	660	560	--	--	--	--	--	--
Selenium	0.41 J	0.5 J	0.35 J	0.81	1	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	230	120	250	160	56 J	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	13	19	9.1	24	23	550	--	--	550	1,400	--
Zinc	29	39	22	35	34	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>											
Barium	0.64	0.51	0.64	0.54	0.49 J	--	--	--	--	--	2
Boron	0.061 J	0.068 J	0.07 J	0.082 J	0.09 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	0.036	0.02 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	2.8	12 L	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.6 L	0.021 J	0.87 L	1.7 L	2.8 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	0.04	0.024 J	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.021 J	0.02 J	0.025 J	0.029 J	0.045 J	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>											
Cadmium	NA	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	69 L	--	--	--	--	--	5
Lead	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.46 L	NA	0.76 L	0.38 L	0.4 L	--	--	--	--	--	0.15

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

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

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

SITE	ISGS #1314V3-1 (ROW)						Comparison Criteria					
	1314V3-01-B19	1314V3-01-B20	1314V3-01-B21	1314V3-01-B22	1314V3-01-B23	1314V3-01-B24	MACs			TACO		
BORING												
SAMPLE	1314V3-01-B19 (0-5)	1314V3-01-B20 (0-6)	1314V3-01-B21 (0-6)	1314V3-01-B22 (0-7)	1314V3-01-B23 (0-8)	1314V3-01-B24 (0-4.5)						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	0-6	0-6	0-7	0-8	0-4.5						
pH	8.5	8.7	8.3	8.2	7.9	7.8	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)												
Acetone	ND U	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)												
2-Methylnaphthalene	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	0.0098 J	ND U	ND U	ND U	0.019 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.011 J	ND U	ND U	ND U	0.02 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	0.022 J	ND U	ND U	ND U	0.027 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	ND U	0.011 J	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	0.011 J	ND U	ND U	ND U	0.021 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.008 J	0.02 J	ND U	ND U	ND U	0.041 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	ND U	0.012 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	0.0087 J	ND U	ND U	ND U	0.02 J	--	--	--	--	--	--
Pyrene	0.01 J	0.018 J	ND U	ND U	ND U	0.034 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)												
Antimony	ND U	0.37 J	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	3.2	4.2	4.6	2.6	2.4	3.8	11.3	13	--	13	61	--
Barium	59	71	45	78 J	66	66	1,500	--	--	5,500	14,000	--
Beryllium	0.45	0.47	0.47	0.4	0.43	0.54	22	--	--	160	410	--
Boron	1.8 J	3	3.9	2.1 J	3	3.1	40	--	--	16,000	41,000	--
Cadmium	0.14	0.35	0.19	0.22	0.14	0.2	5.2	--	--	78	200	--
Calcium	19,000	22,000	67,000	16,000 J	58,000	20,000	--	--	--	--	--	--
Chromium	9.7	13	12	8.3	11	15	21	--	--	230	690	--
Cobalt	6.9	5.5	7.8	6.3	5.7	11	20	--	--	4,700	12,000	--
Copper	10	12	13	8 J	10	15	2,900	--	--	2,900	8,200	--
Iron	11,000	13,000	13,000	9,400	10,000	14,000	15,000	15,900	--	--	--	--
Lead	10	22	11	7.4 J	8.3	21	107	--	--	400	700	--
Magnesium	9,500	11,000	21,000	9,800 J	18,000	9,400	325,000	--	--	--	730,000	--
Manganese	350	410	300	510 J	240	340	630	636	--	1,600	4,100	--
Mercury	0.027	0.015 J	0.029	0.057	0.012 J	0.039	0.89	--	--	10	0.1	--
Nickel	15	13	19	14	13	20	100	--	--	1,600	4,100	--
Potassium	600	1,100	850	680 J	690	810	--	--	--	--	--	--
Selenium	0.66	ND U	0.41 J	0.57 J	ND U	ND U	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	150	170	440	1,200 J	210	130	--	--	--	--	--	--
Thallium	ND U	0.93	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	15	18	18	11	15	24	550	--	--	550	1,400	--
Zinc	34	39	41	35 J	32	51	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)												
Barium	0.66	0.67	0.63	0.48 J	0.43 J	0.77	--	--	--	--	--	2
Boron	0.078 J	0.072 J	ND U	0.098 J	ND U	ND U	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	ND U	0.0024 J	--	--	--	--	--	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	1 L	0.17 L	0.96 L	0.28 L	1.5 L	0.82 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	0.055	ND U	0.016 J	0.01 J	--	--	--	--	--	0.1
Selenium	ND U	0.021 J	0.024 J	ND U	ND U	0.023 J	--	--	--	--	--	0.05
Zinc	0.068 J	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	0.21 L	0.44 L	0.72 L	0.94 J L	ND U	0.2 L	--	--	--	--	--	0.15

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

SITE	ISGS #1314V3-1 (ROW)					Comparison Criteria					
	1314V3-01-B25	1314V3-01-B26	1314V3-01-B27			MACs			TACO		
SAMPLE	1314V3-01-B25 (0-8.2)	1314V3-01-B26 (0-2)	1314V3-01-B27 (0-8)	1314V3-01-B27 (8-15)	1314V3-01-B27 (15-22)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-8.2	0-2	0-8	8-15	15-22						
pH	7.8	8.4	9.1 #	8.9	8.8						
<b>VOCs (mg/kg)</b>											
Acetone	ND U	ND U	0.036	0.021	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	0.045	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	0.0025	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	0.0078	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	0.27	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>											
2-Methylnaphthalene	ND U	ND U	0.15	19	0.017 J	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	0.15 J	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	0.016 J	0.14	33	0.045	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.012 J	0.2	0.91	ND U	--	--	--	--	--	--
Anthracene	ND U	0.08	0.46	22	0.021 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.011 J	0.34	2 †mr*	18 †mr*	0.061	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.0091 J	0.39 †	11 †mr*	10 †mr*	0.058	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.013 J	0.58	17 †mr*	16 †mr*	0.091	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	0.15	6	1.9	0.015 J	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.22	5.2	5.9	0.034 J	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	0.096 J	0.69	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	0.17 J	4.8 †	ND U	0.6	--	--	32	6,200	--
Chrysene	0.011 J	0.37	4.1	18	0.063	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.037	2.1 †mr*	0.86 †mr*	0.0093 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	0.071 J	24	ND U	--	--	--	--	--	--
Fluoranthene	0.019 J	0.75	1.9	74	0.11	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.021 J	0.12	32	0.036	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.18	5.8 †mr*	2.5 †mr*	0.021 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	0.3	15 †tc	0.017 J	1.8	--	--	170	1.8	--
Phenanthrene	0.019 J	0.35	0.5	98	0.089	--	--	--	--	--	--
Pyrene	0.019 J	0.61	3.3	45	0.088	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>											
Antimony	ND U	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	5.3	3.6	4.7	5.1	3.6	11.3	13	--	13	61	--
Barium	31	71	210	56	46	1,500	--	--	5,500	14,000	--
Beryllium	0.46	0.53	0.71	0.43	0.42	22	--	--	160	410	--
Boron	2.7 J	3.7	9.7	4	2 J	40	--	--	16,000	41,000	--
Cadmium	0.14	0.22	1.2	0.37	0.13	5.2	--	--	78	200	--
Calcium	33,000	21,000	21,000	30,000	26,000	--	--	--	--	--	--
Chromium	11	26 †	26 †	8.4	13	21	--	--	230	690	--
Cobalt	7.9	10	5.5	6.9	8.1	20	--	--	4,700	12,000	--
Copper	12	20	51	17	12	2,900	--	--	2,900	8,200	--
Iron	14,000	15,000	12,000	12,000	12,000	15,000	15,900	--	--	--	--
Lead	9.6	38	1,600 †tc	49	13	107	--	--	400	700	--
Magnesium	17,000	8,900	5,700	12,000	11,000	325,000	--	--	--	730,000	--
Manganese	370	430	200	350	280	630	636	--	1,600	4,100	--
Mercury	0.034	0.026	0.19	0.016 J	0.016 J	0.89	--	--	10	0.1	--
Nickel	17	27	19	14	20	100	--	--	1,600	4,100	--
Potassium	770	940	600	620	630	--	--	--	--	--	--
Selenium	ND U	0.29 J	0.83	0.68	0.31 J	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	110	380	480	410	84	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	17	25	15	14	15	550	--	--	550	1,400	--
Zinc	37	63	680	100	39	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>											
Barium	0.82	0.69	0.89	0.87	0.82	--	--	--	--	--	2
Boron	ND U	ND U	0.079 J	0.064 J	0.059 J	--	--	--	--	--	2
Cadmium	0.002 J	ND U	0.0086 L	ND U	0.0021 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.023 J	ND U	0.027	0.028	0.02 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	0.93	--	--	--	--	--	5
Lead	ND U	ND U	0.37 L	ND U	0.0077 L	--	--	--	--	--	0.0075
Manganese	5.2 L	0.24 L	6.2 L	5.3 L	3.1 L	--	--	--	--	--	0.15
Nickel	0.034	ND U	0.033	0.04	0.038	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	ND U	0.97	ND U	ND U	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>											
Cadmium	NA	NA	ND U	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	1.4 L	NA	0.023 L	--	--	--	--	--	0.0075
Manganese	0.14	0.64 L	0.74 L	0.74 L	0.37 L	--	--	--	--	--	0.15

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

SITE	ISGS #1314V3-1 (ROW)					Comparison Criteria					
	1314V3-01-B28	1314V3-01-B29	1314V3-01-B30	1314V3-01-B31	1314V3-01-B32	MACs			TACO		
SAMPLE	1314V3-01-B28 (0-4.5)	1314V3-01-B29 (0-5)	1314V3-01-B30 (0-6)	1314V3-01-B31 (0-6)	1314V3-01-B32 (0-6)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-4.5	0-5	0-6	0-6	0-6						
pH	9.4 #	9.4 #	9.7 #	8.5	8.2						
<b>VOCs (mg/kg)</b>											
Acetone	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>											
2-Methylnaphthalene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3-Dichlorobenzidine	ND U	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	0.0064 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	0.0053 J	0.0088 J	0.0096 J	0.028 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	0.011 J	0.031 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	0.016 J	0.021 J	0.043 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	0.015 J	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	0.018 J	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	ND U	0.011 J	0.01 J	0.031 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	ND U	0.012 J	0.02 J	0.055 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	0.016 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	ND U	ND U	0.011 J	0.029 J	--	--	--	--	--	--
Pyrene	ND U	ND U	0.015 J	0.02 J	0.048 J	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>											
Antimony	ND UJ	ND U	0.37 J	0.29 J	ND U	5	--	--	31	82	--
Arsenic	2.2	4.3	6.3	6.1	3.7	11.3	13	--	13	61	--
Barium	51 J	42	47	38	48	1,500	--	--	5,500	14,000	--
Beryllium	0.44	0.47	0.48	0.46	0.42	22	--	--	160	410	--
Boron	2.6 J	2.9	4.3	3.9	3.5	40	--	--	16,000	41,000	--
Cadmium	0.14 J	0.18	0.32	0.25	0.22	5.2	--	--	78	200	--
Calcium	19,000 J	57,000	39,000	40,000	90,000	--	--	--	--	--	--
Chromium	12	12	12	11	9.6	21	--	--	230	690	--
Cobalt	6.7	7.6	5.7	6.6	7.9	20	--	--	4,700	12,000	--
Copper	11	13	12	11	11	2,900	--	--	2,900	8,200	--
Iron	10,000	13,000	15,000	14,000	11,000	15,000	15,900	--	--	--	--
Lead	9.5	14	9.7	6.7	36	107	--	--	400	700	--
Magnesium	11,000 J	16,000	21,000	21,000	14,000	325,000	--	--	--	730,000	--
Manganese	180 J	290	350	440	930 fm	630	636	--	1,600	4,100	--
Mercury	0.019	0.02	0.012 J	0.038	0.03	0.89	--	--	10	0.1	--
Nickel	17	19	14	14	18	100	--	--	1,600	4,100	--
Potassium	740 J	740	1,200	1,300	680	--	--	--	--	--	--
Selenium	0.52 J	ND U	ND U	ND U	0.31 J	1.3	--	--	390	1,000	--
Silver	ND UJ	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	500	1,100	1,300	1,000	180	--	--	--	--	--	--
Thallium	ND U	ND U	0.71	0.94	ND U	2.6	--	--	6.3	160	--
Vanadium	19	19	21	17	14	550	--	--	550	1,400	--
Zinc	40	42	34	28	42	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>											
Barium	0.57	0.53	0.66	0.6	0.85	--	--	--	--	--	2
Boron	0.057 J	ND U	ND U	0.053 J	ND U	--	--	--	--	--	2
Cadmium	0.0028 J	ND U	ND U	0.0022 J	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.02 J	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	5.4 L	0.58 L	0.24 L	2.5 L	0.6 L	--	--	--	--	--	0.15
Nickel	0.027	0.016 J	0.011 J	0.028	ND U	--	--	--	--	--	0.1
Selenium	ND U	0.025 J	ND U	ND U	0.023 J	--	--	--	--	--	0.05
Zinc	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>											
Cadmium	NA	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	1.9 L	1.4 L	1.3 L	0.59 L	0.31 L	--	--	--	--	--	0.15

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

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B33	1314V3-01-B34			MACs			TACO		
SAMPLE	1314V3-01-B33 (0-2.5)	1314V3-01-B34 (0-7)	1314V3-01-B34 (7-14)	1314V3-01-B34 (14-20)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-2.5	0-7	7-14	14-20						
pH	9.1 #	8.6	8.6	8.6						
<b>VOCs (mg/kg)</b>										
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	0.012 J	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.042	0.011 J	0.0068 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.13	0.05	0.036 J	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.13	0.055	0.03 J	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.18	0.079	0.043	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.049	0.028 J	0.02 J	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.071	0.033 J	0.015 J	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.13	0.056	0.039	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.0075 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.31	0.093	0.1	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.013 J	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.058	0.025 J	0.018 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	0.18	0.05	0.056	ND U	--	--	--	--	--	--
Pyrene	0.23	0.091	0.078	ND U	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>										
Antimony	ND U	ND U	ND U	0.34 J	5	--	--	31	82	--
Arsenic	5.1	4.8	4	3 J	11.3	13	--	13	61	--
Barium	58	68	55	48	1,500	--	--	5,500	14,000	--
Beryllium	0.44	0.43	0.4	0.46	22	--	--	160	410	--
Boron	3.8	3.7	3.3	2.5 J	40	--	--	16,000	41,000	--
Cadmium	0.29	0.27	0.21	0.15	5.2	--	--	78	200	--
Calcium	73,000	26,000	61,000	30,000	--	--	--	--	--	--
Chromium	11	10	10	11	21	--	--	230	690	--
Cobalt	7.3	7.1	7	6.8 J	20	--	--	4,700	12,000	--
Copper	14	33	9.6	11	2,900	--	--	2,900	8,200	--
Iron	12,000	12,000	12,000	12,000	15,000	15,900	--	--	--	--
Lead	75	37	8.8	8.1	107	--	--	400	700	--
Magnesium	11,000	11,000	21,000	15,000	325,000	--	--	--	730,000	--
Manganese	370	330	360	250	630	636	--	1,600	4,100	--
Mercury	0.032	0.07	0.043	0.013 J	0.89	--	--	10	0.1	--
Nickel	18	16	15	17 J	100	--	--	1,600	4,100	--
Potassium	820	670	720	750 J	--	--	--	--	--	--
Selenium	ND U	0.68	0.3 J	0.41 J	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND UJ	4.4	--	--	390	1,000	--
Sodium	950	620	120	76	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	17	18	16	17	550	--	--	550	1,400	--
Zinc	58	60	32	32	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>										
Barium	0.7	1	0.53	0.74	--	--	--	--	--	2
Boron	ND U	0.082 J	0.065 J	0.051 J	--	--	--	--	--	2
Cadmium	ND U	0.0026 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	0.016 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	2.7	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.031	3.7 L	1.1 L	3.9 L	--	--	--	--	--	0.15
Nickel	ND U	0.025	0.01 J	0.033	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	0.069 J	ND U	0.023 J	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	0.76 L	0.21 L	0.35 L	--	--	--	--	--	0.15



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

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B35				MACs			TACO		
BORING	1314V3-01-B35 (0-7)	1314V3-01-B35 (0-7)D	1314V3-01-B35 (7-14)	1314V3-01-B35 (14-20)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil						
MATRIX	0-7	0-7	7-14	14-20						
DEPTH (feet)	8.6	8.5	8.2	8.6						
pH										
<b>VOCs (mg/kg)</b>										
Acetone	ND U	ND U	0.02	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>										
2-Methylnaphthalene	ND U	0.0092 J	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	0.013 J	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	0.0074 J	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.019 J	0.02 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.024 J	0.021 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.037 J	0.035 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.018 J	0.014 J	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.02 J	0.022 J	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.037 J	0.046	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.013 J	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.014 J	0.013 J	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.023 J	0.042	ND U	ND U	--	--	--	--	--	--
Pyrene	0.038	0.038 J	ND U	0.0085 J	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>										
Antimony	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	4.1	4.3	1.1	3.1	11.3	13	--	13	61	--
Barium	62	61	57	20	1,500	--	--	5,500	14,000	--
Beryllium	0.37	0.45	0.33	0.42	22	--	--	160	410	--
Boron	2.3 J	3.2	1.6 J	2.2 J	40	--	--	16,000	41,000	--
Cadmium	0.12	0.17	0.16	0.081 J	5.2	--	--	78	200	--
Calcium	19,000	15,000	2,200	23,000	--	--	--	--	--	--
Chromium	12	12	8.5	10	21	--	--	230	690	--
Cobalt	7.6	8.4	4.4	6.2	20	--	--	4,700	12,000	--
Copper	11	11	7.6	11	2,900	--	--	2,900	8,200	--
Iron	11,000	10,000	7,600	11,000	15,000	15,900	--	--	--	--
Lead	9.7	17	7	7.6	107	--	--	400	700	--
Magnesium	11,000	8,500	1,400	11,000	325,000	--	--	--	730,000	--
Manganese	300	180	88	230	630	636	--	1,600	4,100	--
Mercury	0.047	0.035	0.01 J	0.013 J	0.89	--	--	10	0.1	--
Nickel	16	17	11	13	100	--	--	1,600	4,100	--
Potassium	530	660	440	640	--	--	--	--	--	--
Selenium	0.3 J	0.32 J	0.38 J	0.36 J	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	190	160	120	75	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	21	19	13	15	550	--	--	550	1,400	--
Zinc	37	64	34	31	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>										
Barium	1.2	0.92	0.77	0.51	--	--	--	--	--	2
Boron	0.097 J	0.085 J	0.055 J	0.059 J	--	--	--	--	--	2
Cadmium	0.0027 J	0.0029 J	0.0026 J	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.048	0.035	0.02 J	0.023 J	--	--	--	--	--	1
Iron	ND U	0.24 J	ND U	0.93	--	--	--	--	--	5
Lead	0.0093 L	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	5.9 L	5.5 L	4.7 L	3.6 L	--	--	--	--	--	0.15
Nickel	0.046	0.04	0.021 J	0.054	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	ND U	ND U	ND U	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	--	--	--	--	--	5
Lead	0.031 L	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.21 L	0.36 L	0.31 L	0.42 L	--	--	--	--	--	0.15

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

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B36				MACs			TACO		
BORING	1314V3-01-B36 (0-8)	1314V3-01-B36 (8-16)	1314V3-01-B36 (16-24)	1314V3-01-B36 (24-28)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil						
MATRIX	0-8	8-16	16-24	24-28						
DEPTH (feet)	8.4	8.3	8.5	8.2						
pH										
<b>VOCs (mg/kg)</b>										
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	0.0086 J	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.0052 J	0.029 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.029 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.0092 J	0.036 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	0.013 J	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.014 J	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	0.026 J	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.0087 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	0.058	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.017 J	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	0.041	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	0.054	ND U	ND U	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>										
Antimony	0.6 J	0.34 J	0.3 J	ND U	5	--	--	31	82	--
Arsenic	4.5	5.3	3.4	3.3	11.3	13	--	13	61	--
Barium	31	48	52	25	1,500	--	--	5,500	14,000	--
Beryllium	0.52	0.5	0.39	0.23	22	--	--	160	410	--
Boron	0.8 J	3.2	2.8	3.2	40	--	--	16,000	41,000	--
Cadmium	0.18	0.31	0.24	0.15	5.2	--	--	78	200	--
Calcium	4,000	21,000	38,000	47,000	--	--	--	--	--	--
Chromium	12	13	9.7	5.5	21	--	--	230	690	--
Cobalt	5.6	6.5	7.4	2.9	20	--	--	4,700	12,000	--
Copper	13	13	11	6.7	2,900	--	--	2,900	8,200	--
Iron	15,000	16,000 †m	12,000	7,400	15,000	15,900	--	--	--	--
Lead	7.9	8.7	6.5	4.3	107	--	--	400	700	--
Magnesium	2,600	12,000	18,000	25,000	325,000	--	--	--	730,000	--
Manganese	140	600	370	250	630	636	--	1,600	4,100	--
Mercury	ND U	ND U	ND U	ND U	0.89	--	--	10	0.1	--
Nickel	12	14	15	7.2	100	--	--	1,600	4,100	--
Potassium	880	1,200	1,000	650	--	--	--	--	--	--
Selenium	0.27 J	ND U	ND U	ND U	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	370	92	95	200	--	--	--	--	--	--
Thallium	0.54	1	0.68	0.42 J	2.6	--	--	6.3	160	--
Vanadium	15	24	14	9.5	550	--	--	550	1,400	--
Zinc	30	32	25	18	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>										
Barium	0.69	1.1	0.55	0.54	--	--	--	--	--	2
Boron	0.05 J	0.093 J	ND U	ND U	--	--	--	--	--	2
Cadmium	0.0036 J	0.0038 J	0.0029 J	0.003 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.037	0.027	0.015 J	0.015 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	0.011 L	ND U	ND U	--	--	--	--	--	0.0075
Manganese	6.7 L	10 L	3.4 L	3.4 L	--	--	--	--	--	0.15
Nickel	0.039	0.03	0.022 J	0.023 J	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.025 J	0.13 J	ND U	0.066 J	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	0.069 L	NA	NA	--	--	--	--	--	0.0075
Manganese	0.73 L	0.59 L	0.57 L	0.13	--	--	--	--	--	0.15

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

SITE	ISGS #1314V3-1 (ROW)				Comparison Criteria					
	1314V3-01-B37	1314V3-01-B38	1314V3-01-B39	1314V3-01-B40	MACs			TACO		
SAMPLE	1314V3-01-B37 (0-2)	1314V3-01-B38 (0-4)	1314V3-01-B39 (0-4)	1314V3-01-B40 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-2	0-4	0-4	0-2						
pH	9.2 #	8.7	8.2	8.8						
<b>VOCs (mg/kg)</b>										
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND U	ND U	1.3	--	--	1	280	--
Acenaphthene	ND U	ND UJ	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND UJ	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	0.021 J	ND U	0.018 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.024 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	0.033 J	ND U	0.025 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	0.022 J	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	0.021 J	ND U	0.019 J	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 UJ	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	0.028 J	ND U	0.024 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND UJ	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.021 J	ND U	0.012 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	0.0098 J	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	0.034 J	ND U	0.026 J	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>										
Antimony	ND U	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	3.8	4.5	5.5	5	11.3	13	--	13	61	--
Barium	40	80	82	67	1,500	--	--	5,500	14,000	--
Beryllium	0.48	0.44	0.45	0.41	22	--	--	160	410	--
Boron	2.4 J	2.7	1.8 J	2.3 J	40	--	--	16,000	41,000	--
Cadmium	0.2	0.17	0.2	0.19	5.2	--	--	78	200	--
Calcium	57,000	21,000	2,300	22,000	--	--	--	--	--	--
Chromium	10	12	13	11	21	--	--	230	690	--
Cobalt	8.3	6.5	9.8	8.1	20	--	--	4,700	12,000	--
Copper	12	12	14	12	2,900	--	--	2,900	8,200	--
Iron	16,000 tm	12,000	14,000	13,000	15,000	15,900	--	--	--	--
Lead	9.1	14	12	13	107	--	--	400	700	--
Magnesium	18,000	11,000	1,800	12,000	325,000	--	--	--	730,000	--
Manganese	350	250	440	390	630	636	--	1,600	4,100	--
Mercury	0.039	0.027	0.024	0.03	0.89	--	--	10	0.1	--
Nickel	19	16	25	19	100	--	--	1,600	4,100	--
Potassium	700	630	590	710	--	--	--	--	--	--
Selenium	0.47 J	0.26 J	ND U	0.51 J	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	740	1,500	750	720	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	15	22	25	19	550	--	--	550	1,400	--
Zinc	43	43	57	46	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>										
Barium	0.54	0.85	0.41 J	1.1	--	--	--	--	--	2
Boron	0.076 J	ND U	ND U	0.061 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
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.1 L	0.46 L	0.018 J	0.41 L	--	--	--	--	--	0.15
Nickel	ND U	0.011 J	ND U	0.012 J	--	--	--	--	--	0.1
Selenium	ND U	0.021 J	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.044 J	ND U	ND U	0.024 J	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	NA	--	--	--	--	--	5
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.88 L	1.6 L	NA	1.2 L	--	--	--	--	--	0.15

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

SITE	ISGS #1314V3-1 (ROW)			Comparison Criteria					
	1314V3-01-B41	1314V3-01-B42	1314V3-01-B43	MACs			TACO		
SAMPLE	1314V3-01-B41 (0-2)	1314V3-01-B42 (0-2)	1314V3-01-B43 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-2	0-2	0-2						
pH	8.7	9.1 #	8.8						
<b>VOCs (mg/kg)</b>									
Acetone	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Ethylbenzene	ND U	ND U	ND U	13	--	--	400	58	--
Tetrachloroethene	ND U	ND U	ND U	0.06	--	--	11	28	--
Toluene	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	ND U	5.6	--	--	320	5.6	--
<b>SVOCs (mg/kg)</b>									
2-Methylnaphthalene	ND U	ND U	ND U	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ND U	ND U	ND UJ	1.3	--	--	1	280	--
Acenaphthene	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	0.012 J	0.0099 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.019 J	0.061	0.056	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.067	0.072	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.031 J	0.091	0.11	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.015 J	0.043	0.091 J	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.031 J	0.033 J	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND UJ	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.022 J	0.072	0.074	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	0.04	0.12	0.11	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.036 J	0.039	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.013 J	0.046	0.064	--	--	--	--	--	--
Pyrene	0.032 J	0.11	0.12 J	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>									
Antimony	ND U	0.41 J	ND U	5	--	--	31	82	--
Arsenic	5.1	6.5	5.7	11.3	13	--	13	61	--
Barium	73	100	85	1,500	--	--	5,500	14,000	--
Beryllium	0.47	0.56	0.49	22	--	--	160	410	--
Boron	2.6 J	3.5	2.1 J	40	--	--	16,000	41,000	--
Cadmium	0.22	0.38	0.3	5.2	--	--	78	200	--
Calcium	19,000	13,000	14,000	--	--	--	--	--	--
Chromium	13	15	13	21	--	--	230	690	--
Cobalt	8	8.1	8.1	20	--	--	4,700	12,000	--
Copper	14	20	15	2,900	--	--	2,900	8,200	--
Iron	13,000	18,000 †m	14,000	15,000	15,900	--	--	--	--
Lead	32	130 †	91	107	--	--	400	700	--
Magnesium	11,000	5,200	5,900	325,000	--	--	--	730,000	--
Manganese	370	460	480	630	636	--	1,600	4,100	--
Mercury	0.035	0.16	0.031	0.89	--	--	10	0.1	--
Nickel	19	21	20	100	--	--	1,600	4,100	--
Potassium	680	770	680	--	--	--	--	--	--
Selenium	0.74	0.94	0.6	1.3	--	--	390	1,000	--
Silver	ND U	ND U	ND U	4.4	--	--	390	1,000	--
Sodium	360	430	370	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	20	22	20	550	--	--	550	1,400	--
Zinc	57	110	81	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>									
Barium	1.2	1.1	0.97	--	--	--	--	--	2
Boron	0.082 J	ND U	0.12 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	0.0086 L	0.009 L	--	--	--	--	--	0.0075
Manganese	0.31 L	0.079	0.21 L	--	--	--	--	--	0.15
Nickel	0.011 J	ND U	0.01 J	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	0.048 J	0.15 J	0.11 J	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>									
Cadmium	NA	NA	NA	--	--	--	--	--	0.005
Iron	NA	NA	NA	--	--	--	--	--	5
Lead	NA	0.3 L	0.14 L	--	--	--	--	--	0.0075
Manganese	0.89 L	NA	0.69 L	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-66 (Scottish Rite Masonic Center)			Comparison Criteria					
	1314V3-66-B01		1314V3-66-B02	MACs			TACO		
BORING	1314V3-66-B01 (0-7)		1314V3-66-B01 (0-7)D						
SAMPLE	1314V3-66-B01 (0-7)		1314V3-66-B02 (0-6)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-7	0-7	0-6						
pH	8.6	8.8	8.2						
<b>VOCs (None Detected)</b>									
<b>SVOCs (mg/kg)</b>									
Benzo(a)anthracene	ND U	0.029 J	0.011 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.04	0.016 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	0.059	0.029 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND UJ	0.023 J	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.022 J	ND U	9	--	--	9	1,700	--
Chrysene	ND U	0.039	0.017 J	88	--	--	88	17,000	--
Fluoranthene	ND U	0.088	0.035 J	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.029 J	0.015 J	0.9	1.6	0.9	1.6	170	--
Phenanthrene	ND U	0.033 J	0.012 J	--	--	--	--	--	--
Pyrene	ND U	0.065	0.027 J	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>									
Antimony	ND U	0.25 J	ND U	5	--	--	31	82	--
Arsenic	7.7	5.8	4.5	11.3	13	--	13	61	--
Barium	58	58	91	1,500	--	--	5,500	14,000	--
Beryllium	0.49	0.48	0.53	22	--	--	160	410	--
Boron	2.5 J	2.5 J	2 J	40	--	--	16,000	41,000	--
Cadmium	0.19	0.14	0.24	5.2	--	--	78	200	--
Calcium	15,000	11,000	2,600	--	--	--	--	--	--
Chromium	10	11	11	21	--	--	230	690	--
Cobalt	6.2	6.1	6.6	20	--	--	4,700	12,000	--
Copper	11	9.6	11	2,900	--	--	2,900	8,200	--
Iron	13,000	13,000	15,000	15,000	15,900	--	--	--	--
Lead	8.5	15	7.8	107	--	--	400	700	--
Magnesium	9,600	5,800	1,800	325,000	--	--	--	730,000	--
Manganese	360	350	670 †m	630	636	--	1,600	4,100	--
Mercury	0.021	0.028	0.018 J	0.89	--	--	10	0.1	--
Nickel	14	12	18	100	--	--	1,600	4,100	--
Potassium	770	740	840	--	--	--	--	--	--
Selenium	ND U	0.31 J	0.47 J	1.3	--	--	390	1,000	--
Sodium	430	420	140	--	--	--	--	--	--
Thallium	1.1	0.94	1.5	2.6	--	--	6.3	160	--
Vanadium	23	22	17	550	--	--	550	1,400	--
Zinc	28	28	40	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>									
Barium	0.65	0.65	0.32 J	--	--	--	--	--	2
Boron	0.053 J	0.087 J	ND U	--	--	--	--	--	2
Lead	ND U	0.008 L	ND U	--	--	--	--	--	0.0075
Manganese	0.27 L	0.14	ND U	--	--	--	--	--	0.15
Selenium	0.021 J	ND U	ND U	--	--	--	--	--	0.05
<b>SPL Metals (mg/L)</b>									
Lead	NA	0.073 J L	NA	--	--	--	--	--	0.0075
Manganese	0.58 J L	NA	NA	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-67 (Vacant Land)						Comparison Criteria						
	1314V3-67-B01		1314V3-67-B02	1314V3-67-B03	1314V3-67-B04		MACs			TACO			
BORING	1314V3-67-B01 (0-5)		1314V3-67-B01 (5-9)	1314V3-67-B02 (0-6)	1314V3-67-B03 (0-4)	1314V3-67-B04 (0-7)	1314V3-67-B04 (7-13)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil							
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-9	0-6	0-4	0-7	7-13							
pH	8.3	8.2	8.2	8.9	7.9	8.1							
<b>VOCs (None Detected)</b>													
<b>SVOCs (mg/kg)</b>													
Anthracene	ND U	ND U	ND U	ND U	ND U	0.0069 J	12,000	--	--	--	23,000	610,000	--
Benzo(a)anthracene	0.023 J	0.01 J	ND U	0.0064 J	ND U	0.043	0.9	1.8	1.1	--	1.8	170	--
Benzo(a)pyrene	0.026 J	0.013 J	ND U	ND U	ND U	0.052	0.09	2.1	1.3	--	2.1	17	--
Benzo(b)fluoranthene	0.034 J	0.022 J	ND U	0.012 J	ND U	0.068	0.9	2.1	1.5	--	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	ND U	0.022 J	--	--	--	--	--	--	--
Benzo(k)fluoranthene	0.015 J	ND U	ND U	ND U	ND U	0.025 J	9	--	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND U	0.12 J	46	--	--	--	46	4,100	--
Chrysene	0.023 J	0.013 J	ND U	ND U	ND U	0.045	88	--	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	ND U	0.09	0.42	0.2	--	0.42	17	--
Fluoranthene	0.047	0.021 J	ND U	0.0099 J	0.014 J	0.082	3,100	--	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.015 J	0.011 J	ND U	ND U	ND U	0.032 J	0.9	1.6	0.9	--	1.6	170	--
Phenanthrene	0.035 J	0.011 J	ND U	0.0059 J	0.0073 J	0.033 J	--	--	--	--	--	--	--
Pyrene	0.045	0.019 J	ND U	0.0099 J	0.012 J	0.075	2,300	--	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>													
Antimony	0.28 J	0.25 J	0.29 J	0.33 J	0.23 J	0.27 J	5	--	--	--	31	82	--
Arsenic	3.6	3.4	2.9	4.1	3.6	3.8	11.3	13	--	--	13	61	--
Barium	64	86	120	56	61	73	1,500	--	--	--	5,500	14,000	--
Beryllium	0.41	0.48	0.41	0.53	0.45	0.5	22	--	--	--	160	410	--
Boron	3.4	3.7	2.3 J	2.7 J	2.5 J	4.1	40	--	--	--	16,000	41,000	--
Cadmium	0.24	0.21	0.26	0.17	0.1 J	0.3	5.2	--	--	--	78	200	--
Calcium	22,000	9,200	8,800	29,000	6,500	8,600	--	--	--	--	--	--	--
Chromium	8.8	10	11	11	10	11	21	--	--	--	230	690	--
Cobalt	5.1	4.3	7	6.4	4.1	5.2	20	--	--	--	4,700	12,000	--
Copper	9	13	8.5	11	9.1	12	2,900	--	--	--	2,900	8,200	--
Iron	11,000	11,000	11,000	14,000	13,000	12,000	15,000	15,900	--	--	--	--	--
Lead	32	50	6.3	7.9	8	50	107	--	--	--	400	700	--
Magnesium	13,000	5,600	5,400	13,000	4,400	4,700	325,000	--	--	--	--	730,000	--
Manganese	460	230	960 ↑m	290	190	310	630	636	--	--	1,600	4,100	--
Mercury	0.026	0.045	0.015 J	0.039	0.031	0.047	0.89	--	--	--	10	0.1	--
Nickel	12	11	17	15	9	12	100	--	--	--	1,600	4,100	--
Potassium	750	830	820	860	850	940	--	--	--	--	--	--	--
Selenium	ND U	0.37 J	0.3 J	ND U	0.37 J	0.32 J	1.3	--	--	--	390	1,000	--
Sodium	97	180	51	600	84	150	--	--	--	--	--	--	--
Thallium	1.1	0.87	1.6	0.91	0.91	1	2.6	--	--	--	6.3	160	--
Vanadium	16	16	15	19	15	16	550	--	--	--	550	1,400	--
Zinc	39	60	27	28	30	69	5,100	--	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>													
Barium	0.88	0.88	0.72	0.91	0.84	0.76	--	--	--	--	--	--	2
Boron	0.063 J	0.095 J	0.076 J	0.053 J	0.11 J	0.18 J	--	--	--	--	--	--	2
Cadmium	0.0028 J	0.0034 J	ND U	0.002 J	0.002 J	0.004 J	--	--	--	--	--	--	0.005
Iron	0.44	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	--	5
Lead	0.0091 L	0.033 L	ND U	ND U	ND U	0.024 L	--	--	--	--	--	--	0.0075
Manganese	0.81 L	1.1 L	0.11	0.52 L	0.41 L	2.3 L	--	--	--	--	--	--	0.15
Nickel	ND U	0.019 J	ND U	ND U	ND U	0.018 J	--	--	--	--	--	--	0.1
Zinc	0.2 J	0.28 J	ND U	ND U	ND U	0.42 J	--	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>													
Lead	0.074 L	0.25 L	NA	NA	NA	0.089 L	--	--	--	--	--	--	0.0075
Manganese	0.24 L	0.32 L	NA	0.67 L	0.2 L	0.17 L	--	--	--	--	--	--	0.15

C-14

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

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-67 (Vacant Land)				Comparison Criteria					
	1314V3-67-B05	1314V3-67-B06	1314V3-67-B07	1314V3-67-B08	MACs			TACO		
BORING	1314V3-67-B05 (0-6)	1314V3-67-B06 (0-4)	1314V3-67-B07 (0-4)	1314V3-67-B08 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE										
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	0-4	0-4	0-4						
pH	9	8.7	8.3	8.2						
<b>VOCs (None Detected)</b>										
<b>SVOCs (mg/kg)</b>										
Anthracene	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.012 J	0.016 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.014 J	0.02 J	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.022 J	0.029 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Chrysene	0.013 J	0.014 J	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.0077 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.026 J	0.022 J	ND U	ND U	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.012 J	0.013 J	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.019 J	0.013 J	ND U	ND U	--	--	--	--	--	--
Pyrene	0.023 J	0.02 J	ND U	ND U	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>										
Antimony	0.26 J	0.23 J	ND U	0.27 J	5	--	--	31	82	--
Arsenic	4.4	2.6	2.3	6.6	11.3	13	--	13	61	--
Barium	47	70	74	76	1,500	--	--	5,500	14,000	--
Beryllium	0.48	0.48	0.47	0.53	22	--	--	160	410	--
Boron	4.2	3.2	1.8 J	1.7 J	40	--	--	16,000	41,000	--
Cadmium	0.28	0.21	0.23	0.18	5.2	--	--	78	200	--
Calcium	42,000	6,400	4,000	2,700	--	--	--	--	--	--
Chromium	11	10	9.6	12	21	--	--	230	690	--
Cobalt	5.3	4.6	4.4	5.5	20	--	--	4,700	12,000	--
Copper	12	9.9	9.4	10	2,900	--	--	2,900	8,200	--
Iron	13,000	13,000	11,000	15,000	15,000	15,900	--	--	--	--
Lead	11	11	7.1	7.2	107	--	--	400	700	--
Magnesium	17,000	3,200	2,200	2,000	325,000	--	--	--	730,000	--
Manganese	290	330	310	480	630	636	--	1,600	4,100	--
Mercury	0.046	0.032	0.019	0.024	0.89	--	--	10	0.1	--
Nickel	19	11	11	14	100	--	--	1,600	4,100	--
Potassium	1,300	770	600	680	--	--	--	--	--	--
Selenium	0.33 J	0.45 J	0.35 J	0.5 J	1.3	--	--	390	1,000	--
Sodium	860	740	180	170	--	--	--	--	--	--
Thallium	0.95	0.96	0.79	1.3	2.6	--	--	6.3	160	--
Vanadium	18	15	13	24	550	--	--	550	1,400	--
Zinc	31	36	33	30	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>										
Barium	0.53	0.66	0.32 J	0.32 J	--	--	--	--	--	2
Boron	0.063 J	0.089 J	0.093 J	0.057 J	--	--	--	--	--	2
Cadmium	0.0024 J	ND U	ND U	ND U	--	--	--	--	--	0.005
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.6 L	0.33 L	0.024 J	ND U	--	--	--	--	--	0.15
Nickel	0.028	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	ND U	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>										
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	1 L	0.48 J L	NA	NA	--	--	--	--	--	0.15

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

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-74 (Residence)	Comparison Criteria					
		MACs			TACO		
BORING	1314V3-74-B01	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-74-B01 (0-2)						
MATRIX	Soil						
DEPTH (feet)	0-2						
pH	9						
<b>VOCs (None Detected)</b>							
<b>SVOCs (mg/kg)</b>							
Benzo(a)anthracene	0.025 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.031 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.046	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.024 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.017 J	9	--	--	9	1,700	--
Chrysene	0.03 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.01 J	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.05	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.019 J	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.023 J	--	--	--	--	--	--
Pyrene	0.048	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>							
Antimony	0.73 J	5	--	--	31	82	--
Arsenic	3.7	11.3	13	--	13	61	--
Barium	43 J	1,500	--	--	5,500	14,000	--
Beryllium	0.45 J	22	--	--	160	410	--
Boron	5 J	40	--	--	16,000	41,000	--
Cadmium	0.24 J	5.2	--	--	78	200	--
Calcium	48,000	--	--	--	--	--	--
Chromium	10 J	21	--	--	230	690	--
Cobalt	5.6 J	20	--	--	4,700	12,000	--
Copper	12	2,900	--	--	2,900	8,200	--
Iron	13,000	15,000	15,900	--	--	--	--
Lead	9	107	--	--	400	700	--
Magnesium	24,000	325,000	--	--	--	730,000	--
Manganese	330	630	636	--	1,600	4,100	--
Mercury	0.022	0.89	--	--	10	0.1	--
Nickel	13 J	100	--	--	1,600	4,100	--
Potassium	1,400 J	--	--	--	--	--	--
Selenium	0.31 J	1.3	--	--	390	1,000	--
Sodium	640	--	--	--	--	--	--
Thallium	0.98 J	2.6	--	--	6.3	160	--
Vanadium	16	550	--	--	550	1,400	--
Zinc	34 J	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>							
Barium	0.58	--	--	--	--	--	2
Cadmium	0.0025 J	--	--	--	--	--	0.005
Manganese	0.95 L	--	--	--	--	--	0.15
<b>SPLP Metals (mg/L)</b>							
Manganese	1.1 L	--	--	--	--	--	0.15



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

CONTAMINANTS OF CONCERN

SITE	ISGS #1314V3-75 (Residence)	Comparison Criteria					
		MACs			TACO		
BORING	1314V3-75-B01	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	1314V3-75-B01 (0-2)						
MATRIX	Soil						
DEPTH (feet)	0-2						
pH	9.1 #						
<b>VOCs (None Detected)</b>							
<b>SVOCs (mg/kg)</b>							
Benzo(a)anthracene	0.033 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.041	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.055	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.019 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.02 J	9	--	--	9	1,700	--
Chrysene	0.035 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.012 J	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.053	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.024 J	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.033 J	--	--	--	--	--	--
Pyrene	0.05	2,300	--	--	2,300	61,000	--
<b>Inorganics (mg/kg)</b>							
Antimony	0.69 J	5	--	--	31	82	--
Arsenic	5.9	11.3	13	--	13	61	--
Barium	97	1,500	--	--	5,500	14,000	--
Beryllium	0.71	22	--	--	160	410	--
Boron	6.9	40	--	--	16,000	41,000	--
Cadmium	0.5	5.2	--	--	78	200	--
Calcium	23,000	--	--	--	--	--	--
Chromium	13	21	--	--	230	690	--
Cobalt	6	20	--	--	4,700	12,000	--
Copper	16	2,900	--	--	2,900	8,200	--
Iron	17,000 †m	15,000	15,900	--	--	--	--
Lead	81	107	--	--	400	700	--
Magnesium	10,000	325,000	--	--	--	730,000	--
Manganese	440	630	636	--	1,600	4,100	--
Mercury	0.079	0.89	--	--	10	0.1	--
Nickel	15	100	--	--	1,600	4,100	--
Potassium	930	--	--	--	--	--	--
Selenium	0.46 J	1.3	--	--	390	1,000	--
Silver	0.1 J	4.4	--	--	390	1,000	--
Sodium	970	--	--	--	--	--	--
Thallium	1.4	2.6	--	--	6.3	160	--
Vanadium	27	550	--	--	550	1,400	--
Zinc	89	5,100	--	--	23,000	61,000	--
<b>TCLP Metals (mg/L)</b>							
Barium	1.1	--	--	--	--	--	2
Cadmium	0.0042 J	--	--	--	--	--	0.005
Iron	ND U	--	--	--	--	--	5
Lead	0.016 L	--	--	--	--	--	0.0075
Manganese	0.49 L	--	--	--	--	--	0.15
Zinc	0.1 J	--	--	--	--	--	5
<b>SPLP Metals (mg/L)</b>							
Lead	0.3 L	--	--	--	--	--	0.0075
Manganese	0.8 L	--	--	--	--	--	0.15

# D

## Laboratory Data Package and Site Photographs (on CD-ROM)

## DATA REVIEW MEMORANDUM

**DATE:** January 4, 2017  
**TO:** Dean Tiebout, Project Manager, E & E, Chicago  
**FROM:** Joanna Christopher, Chemist, E & E, Buffalo  
**SUBJ:** Data Review – IDOT - I-74 - WO 046 (Contract 64E26)

### REFERENCE:

Project ID	Lab Work Order
IDOT - I-74 - WO 046	500-120747-1
IDOT - I-74 - WO 046	500-120748-1
IDOT - I-74 - WO 046	500-120792-1
IDOT - I-74 - WO 046	500-120795-1
IDOT - I-74 - WO 046	500-120882-1
IDOT - I-74 - WO 046	500-120935-1
IDOT - I-74 - WO 046	500-121005-1
IDOT - I-74 - WO 046	500-121261-1

### I. SAMPLE IDENTIFICATION

For the sampling activities for the IDOT - I-74 - WO 046 (Contract 64C08) project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for the methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were not designated in the field. Samples noted as MS/MSD on Table 1 are provided as batch quality control (QC) MS/MSD. All samples were sent to TestAmerica Laboratory – Chicago, IL for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

**Table 1 Sample Listing**

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/MSD	ID Corrections
500-120747-1	Solid	1314V3-01-B43 (0-2)	500-120747-1	11/29/2016	MS/MSD		None
500-120747-1	Solid	1314V3-01-B15 (0-7)	500-120747-10	11/29/2016			None
500-120747-1	Solid	1314V3-01-B15 (7-13)	500-120747-11	11/29/2016			None
500-120747-1	Solid	1314V3-01-B14 (0-6)	500-120747-12	11/29/2016			None
500-120747-1	Solid	1314V3-01-B14 (6-12)	500-120747-13	11/29/2016			None
500-120747-1	Solid	1314V3-01-B12 (0-6)	500-120747-14	11/29/2016			None
500-120747-1	Solid	1314V3-01-B12 (6-11)	500-120747-15	11/29/2016			None
500-120747-1	Solid	1314V3-01-B13 (0-5)	500-120747-16	11/29/2016			None
500-120747-1	Solid	1314V3-01-B22 (0-7)	500-120747-17	11/29/2016	MS/MSD		None
500-120747-1	Solid	1314V3-01-B42 (0-2)	500-120747-2	11/29/2016			None
500-120747-1	Solid	1314V3-01-B41 (0-2)	500-120747-3	11/29/2016			None
500-120747-1	Solid	1314V3-01-B40 (0-2)	500-120747-4	11/29/2016			None
500-120747-1	Solid	1314V3-01-B37 (0-2)	500-120747-5	11/29/2016			None
500-120747-1	Solid	1314V3-01-B19 (0-5)	500-120747-6	11/29/2016			None
500-120747-1	Solid	1314V3-01-B18 (0-7)	500-120747-7	11/29/2016			None
500-120747-1	Solid	1314V3-01-B17 (0-7)	500-120747-8	11/29/2016			None
500-120747-1	Solid	1314V3-01-B16 (0-6)	500-120747-9	11/29/2016			None
500-120748-1	Solid	1314V3-74-B01 (0-2)	500-120748-1	11/29/2016	MS/MSD		None
500-120748-1	Solid	1314V3-75-B01 (0-2)	500-120748-2	11/29/2016			None
500-120792-1	Solid	1314V3-66-B01 (0-7)	500-120792-1	11/30/2016	MS/MSD		None
500-120792-1	Solid	1314V3-67-B01 (5-9)	500-120792-10	11/30/2016			None
500-120792-1	Solid	1314V3-67-B08 (0-4)	500-120792-11	11/30/2016			None
500-120792-1	Solid	1314V3-67-B07 (0-4)	500-120792-12	11/30/2016			None
500-120792-1	Solid	1314V3-67-B06 (0-4)	500-120792-13	11/30/2016	MS/MSD		None
500-120792-1	Solid	1314V3-66-B01 (0-7)D	500-120792-2	11/30/2016			None
500-120792-1	Solid	1314V3-66-B02 (0-6)	500-120792-3	11/30/2016			None
500-120792-1	Solid	1314V3-67-B04 (0-7)	500-120792-4	11/30/2016			None
500-120792-1	Solid	1314V3-67-B04 (7-13)	500-120792-5	11/30/2016			None
500-120792-1	Solid	1314V3-67-B05 (0-6)	500-120792-6	11/30/2016			None
500-120792-1	Solid	1314V3-67-B03 (0-4)	500-120792-7	11/30/2016			None
500-120792-1	Solid	1314V3-67-B02 (0-6)	500-120792-8	11/30/2016			None
500-120792-1	Solid	1314V3-67-B01 (0-5)	500-120792-9	11/30/2016			None
500-120795-1	Solid	1314V3-01-B38 (0-4)	500-120795-1	11/30/2016	MS/MSD		None
500-120795-1	Solid	1314V3-01-B23 (0-8)	500-120795-10	11/30/2016	MS/MSD		None
500-120795-1	Solid	1314V3-01-B39 (0-4)	500-120795-2	11/30/2016	MS/MSD		None
500-120795-1	Solid	1314V3-01-B32 (0-6)	500-120795-3	11/30/2016			None
500-120795-1	Solid	1314V3-01-B33 (0-2.5)	500-120795-4	11/30/2016			None
500-120795-1	Solid	1314V3-01-B29 (0-5)	500-120795-5	11/30/2016			None
500-120795-1	Solid	1314V3-01-B21 (0-6)	500-120795-6	11/30/2016			None
500-120795-1	Solid	1314V3-01-B25 (0-8.2)	500-120795-7	11/30/2016			None

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/MSD	ID Corrections
500-120795-1	Solid	1314V3-01-B26 (0-2)	500-120795-8	11/30/2016			None
500-120795-1	Solid	1314V3-01-B24 (0-4.5)	500-120795-9	11/30/2016			None
500-120882-1	Solid	1314V3-01-B30 (0-6)	500-120882-14	12/1/2016			None
500-120882-1	Solid	1314V3-01-B31 (0-6)	500-120882-15	12/1/2016			None
500-120882-1	Solid	1314V3-01-B20 (0-6)	500-120882-16	12/1/2016	MS/MSD		None
500-120935-1	Solid	1314V3-01-B28 (0-4.5)	500-120935-1	12/2/2016	MS/MSD		None
500-120935-1	Solid	1314V3-01-B27 (0-8)	500-120935-2	12/2/2016			None
500-120935-1	Solid	1314V3-01-B27 (8-15)	500-120935-3	12/2/2016			None
500-120935-1	Solid	1314V3-01-B27 (15-22)	500-120935-4	12/2/2016			None
500-120935-1	Solid	1314V3-01-B35 (0-7)	500-120935-5	12/2/2016			None
500-120935-1	Solid	1314V3-01-B35 (0-7)D	500-120935-6	12/2/2016			None
500-120935-1	Solid	1314V3-01-B35 (7-14)	500-120935-7	12/2/2016			None
500-120935-1	Solid	1314V3-01-B35 (14-20)	500-120935-8	12/2/2016	MS/MSD		None
500-121005-1	Solid	1314V3-01-B34 (0-7)	500-121005-13	12/5/2016			None
500-121005-1	Solid	1314V3-01-B34 (7-14)	500-121005-14	12/5/2016			None
500-121005-1	Solid	1314V3-01-B34 (14-20)	500-121005-15	12/5/2016	MS/MSD		None
500-121261-1	Solid	1314V3-01-B36 (0-8)	500-121261-1	12/8/2016	MS/MSD		None
500-121261-1	Solid	1314V3-01-B36 (8-16)	500-121261-2	12/8/2016			None
500-121261-1	Solid	1314V3-01-B36 (16-24)	500-121261-3	12/8/2016			None
500-121261-1	Solid	1314V3-01-B36 (24-28)	500-121261-4	12/8/2016			None

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
500-120747-1	Solid	EMoisture	Percent Moisture	17	SAMP
500-120747-1	Solid	SW6010B	Metals (ICP)	17	SAMP
500-120747-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	13	SAMP
500-120747-1	Solid	SW6010B_SPLP	Metals_SPLP	3	SAMP
500-120747-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	17	SAMP
500-120747-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	17	SAMP
500-120747-1	Solid	SW7470A_TCLP	Mercury_TCLP	17	SAMP
500-120747-1	Solid	SW7471B	Mercury (CVAA)	17	SAMP
500-120747-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	17	SAMP
500-120747-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	17	SAMP
500-120747-1	Solid	SW9045D	pH	17	SAMP
500-120748-1	Solid	EMoisture	Percent Moisture	2	SAMP
500-120748-1	Solid	SW6010B	Metals (ICP)	2	SAMP
500-120748-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	1	SAMP
500-120748-1	Solid	SW6010B_SPLP	Metals_SPLP	1	SAMP
500-120748-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	2	SAMP
500-120748-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	2	SAMP
500-120748-1	Solid	SW7470A_TCLP	Mercury_TCLP	2	SAMP
500-120748-1	Solid	SW7471B	Mercury (CVAA)	2	SAMP

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
500-120748-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	2	SAMP
500-120748-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	2	SAMP
500-120748-1	Solid	SW9045D	pH	2	SAMP
500-120792-1	Solid	EMoisture	Percent Moisture	13	SAMP
500-120792-1	Solid	SW6010B	Metals (ICP)	13	SAMP
500-120792-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	5	SAMP
500-120792-1	Solid	SW6010B_SPLP	Metals_SPLP	4	SAMP
500-120792-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	13	SAMP
500-120792-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	13	SAMP
500-120792-1	Solid	SW7470A_TCLP	Mercury_TCLP	13	SAMP
500-120792-1	Solid	SW7471B	Mercury (CVAA)	13	SAMP
500-120792-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	13	SAMP
500-120792-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	13	SAMP
500-120792-1	Solid	SW9045D	pH	13	SAMP
500-120795-1	Solid	EMoisture	Percent Moisture	10	SAMP
500-120795-1	Solid	SW6010B	Metals (ICP)	10	SAMP
500-120795-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	8	SAMP
500-120795-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	10	SAMP
500-120795-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	10	SAMP
500-120795-1	Solid	SW7470A_TCLP	Mercury_TCLP	10	SAMP
500-120795-1	Solid	SW7471B	Mercury (CVAA)	10	SAMP
500-120795-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	10	SAMP
500-120795-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	10	SAMP
500-120795-1	Solid	SW9045D	pH	10	SAMP
500-120882-1	Solid	EMoisture	Percent Moisture	3	SAMP
500-120882-1	Solid	SW6010B	Metals (ICP)	3	SAMP
500-120882-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	3	SAMP
500-120882-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	3	SAMP
500-120882-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	3	SAMP
500-120882-1	Solid	SW7470A_TCLP	Mercury_TCLP	3	SAMP
500-120882-1	Solid	SW7471B	Mercury (CVAA)	3	SAMP
500-120882-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	3	SAMP
500-120882-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	3	SAMP
500-120882-1	Solid	SW9045D	pH	3	SAMP
500-120935-1	Solid	EMoisture	Percent Moisture	8	SAMP
500-120935-1	Solid	SW6010B	Metals (ICP)	8	SAMP
500-120935-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	5	SAMP
500-120935-1	Solid	SW6010B_SPLP	Metals_SPLP	3	SAMP
500-120935-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	8	SAMP
500-120935-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	8	SAMP
500-120935-1	Solid	SW7470A_TCLP	Mercury_TCLP	8	SAMP
500-120935-1	Solid	SW7471B	Mercury (CVAA)	8	SAMP

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
500-120935-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	8	SAMP
500-120935-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	2	DL
500-120935-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	8	SAMP
500-120935-1	Solid	SW9045D	pH	8	SAMP
500-121005-1	Solid	EMoisture	Percent Moisture	3	SAMP
500-121005-1	Solid	SW6010B	Metals (ICP)	3	SAMP
500-121005-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	3	SAMP
500-121005-1	Solid	SW6010B_SPLP	Metals_SPLP	1	SAMP
500-121005-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	3	SAMP
500-121005-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	3	SAMP
500-121005-1	Solid	SW7470A_TCLP	Mercury_TCLP	3	SAMP
500-121005-1	Solid	SW7471B	Mercury (CVAA)	3	SAMP
500-121005-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	3	SAMP
500-121005-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	3	SAMP
500-121005-1	Solid	SW9045D	pH	3	SAMP
500-121261-1	Solid	EMoisture	Percent Moisture	4	SAMP
500-121261-1	Solid	SW6010B	Metals (ICP)	4	SAMP
500-121261-1	Solid	SW6010B_SPLP	Metals (ICP)_SPLP	3	SAMP
500-121261-1	Solid	SW6010B_SPLP	Metals_SPLP	1	SAMP
500-121261-1	Solid	SW6010B_TCLP	Metals (ICP)_TCLP	4	SAMP
500-121261-1	Solid	SW6020A_TCLP	Metals (ICP/MS)_TCLP	4	SAMP
500-121261-1	Solid	SW7470A_TCLP	Mercury_TCLP	4	SAMP
500-121261-1	Solid	SW7471B	Mercury (CVAA)	4	SAMP
500-121261-1	Solid	SW8260B	Volatile Organic Compounds (GC/MS)	4	SAMP
500-121261-1	Solid	SW8270D	Semivolatile Organic Compounds (GC/MS)	4	SAMP
500-121261-1	Solid	SW9045D	pH	4	SAMP

## II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4° +/- 2°C) and in good condition as documented on the Cooler Receipt Forms.

### REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperature ( $4^{\circ}\pm 2^{\circ}\text{C}$ ) and in good condition as documented on the Cooler Receipt Forms.

### **III. LABORATORY DATA**

#### **1.0 HOLDING TIMES**

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

#### **REVIEW RESULTS:**

All samples were analyzed within the project-specified holding time.

#### **2.0 BLANKS**

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

#### **REVIEW RESULTS:**

Blanks were performed at the required frequency. Generally, for sample results less than five times the blank detection, if the sample result was less than the PQL, the MDL was elevated to the sample result; however, if the sample result was greater than the PQL, then the PQL was elevated to the sample result. If the sample result was a non-detect, no qualification was required.

For Method SW6010B, calcium, chromium, copper, iron, and nickel were detected in laboratory method blanks below the PQL. For Method SW6010B\_TCLP, boron and zinc were detected in laboratory method blanks below the PQL and lead was detected in one laboratory



method blank above the PQL. For Method SW6020A, zinc was detected in one laboratory method blank below the PQL and iron was detected above the PQL. For Method SW7471B, mercury was detected in one method blank below the PQL. For Method SW8260B, 2-hexanone was detected above the PQL in one laboratory method blank. Associated sample results were qualified as shown in Table 2A.

For Method SW6010B, 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 reported without qualification.

For Method SW8260B, no compounds were detected in the trip blank, sample 1314V3-00-TB03 (which is not discussed in this report but was included in the cooler with samples included in this report).

### **3.0 SURROGATE SPIKE RECOVERY**

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3. No qualification was made to MS/MSD results for samples with surrogate recoveries outside QC limits.

#### **REVIEW RESULTS:**

Surrogate spikes were appropriately added to all field and QC samples. The following surrogate failures were noted for semi-volatile analysis by SW8270D: Samples 1314V3-01-B27 (0-8), 1314V3-01-B27 (8-15), and 1314V3-66-B01 (0-7) each had one acid and/or base/neutral surrogate outside of control limits. Sample 1314V3-01-B27 (8-15) (100X DL) had six acid and/or base/neutral surrogates outside of control limits (diluted out). No qualification of the data was made.

For volatile analysis by Method SW8260B, sample 1314V3-74-B01 (0-2) had one surrogate that recovered above control limits. The associated sample results were non-detects; therefore, no qualification of the data was made.

### **4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS**

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the effects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

#### **REVIEW RESULTS:**

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results for MS/MSDs for project samples were within QC criteria established except as noted on Table 4 (batch MS/MSDs performed for other clients' samples were not included in the table).

If the spiking recovery was high and the analyte was not detected in the sample, no qualification of the data was made; however, if there was a positive detection in the parent sample, then the result was J qualified as estimated.

If the spiking recovery was low and the analyte was not detected in the parent, then the parent result was UJ qualified. If the analyte was detected in the parent sample, then the result was J qualified as estimated.

For laboratory replicate analyses that failed precision, the results in the parent sample were qualified J as estimated if the RPD did not meet the laboratory limit. No qualification was made on the analytes that exhibited poor precision with sample results that were less than 5X the PQL.

The MS and /or MSDs for several metals for Methods SW6010B, manganese for Method SW6010B\_SPLP, and several semivolatile compounds for Method 8270D exhibited failing recoveries. 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, hexachlorocyclopentadiene, and pentachlorophenol exhibited 0% recovery in some of the MS/MSDs; however, these analytes are poor performing compounds in a multi-parameter spike and the associated sample results were qualified with UJ as estimated unless they were rejected for LCS failure and qualified with UR as rejected non-detect as noted in Section 5 (hexachlorocyclopentadiene). [Note: Most of the LCS failures were not associated with the MS/MSD samples.]

## **5.0 LABORATORY CONTROL SAMPLE ANALYSIS**

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the non-detect results flagged "UR" as rejected.

### **REVIEW RESULTS:**

All LCS analyses were within control limits and performed at the required frequency except as noted on Table 5. 2,4-Nitrophenol recovered below control limits for LCS 500-365830/2-A, LCS 500-364515/2-A, and LCS 500-363857/2-A by Method SW8270D; hexachlorocyclopentadiene recovered below control limits for LCS 500-364109/2-A and LCS 500-364515/2-A by Method SW8270D; associated sample results were non-detect and were qualified with UR as rejected non-detect. Carbazole recovered above control limits for LCS 500-363857/2-A and 4-nitroaniline recovered above control limits for LCS 500-364515/2-A by Method SW8270D; associated sample results were non-detect and were reported without qualification.

## **6.0 COMPOUND IDENTIFICATION AND QUANTITATION**

Compound identities are assigned by comparing sample compound retention times to retention times from known (standard) compounds and identification of an acceptable mass spectrum. Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

### **REVIEW RESULTS:**

All compound identification and quantitation criteria were achieved as could be determined from the EDD. Samples were diluted to bring the target concentration within the calibration range or due to matrix effects as shown on Table 6. Generally, there was no impact to data usability. In some cases, elevated reporting limits were provided, which may be above regulatory limits.

For Method SW6020A, as described in the case narrative, the internal standard (Tb) was used to report the element Thallium in batches 500-363685 and 500-364154 due to the LCS being spiked with the trace digestion spike which contains Bismuth. Associated sample results were non-detects and were reported without qualification.

## **7.0 FIELD DUPLICATE SAMPLE RESULTS**

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 70% RPD for soils and 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgment was used to determine whether or not to qualify results.

**REVIEW RESULTS:**

One field duplicate was collected per 29 soil samples. The RPD ratings are listed on Table 7 and were generally "Good". For the field duplicate sample pair for sample 1314V3-66-B01 (0-7) the results for lead and manganese by Method SW6010B\_SPLP were qualified with J as estimated because each was analyzed/detected in only one of the samples and the detected concentration was more than 5X PQL.

**Table 2 - List of Positive Results for Blank Samples**

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW6010B	MB 500-363008/1-A	MBLK	Chromium	0.327	J	A	mg/Kg	0.17	1
SW6010B	MB 500-363316/1-A	MBLK	Calcium	7.21	J	A	mg/Kg	6.4	20
SW6010B	MB 500-363316/1-A	MBLK	Chromium	0.8	J	A	mg/Kg	0.17	1
SW6010B	MB 500-363316/1-A	MBLK	Iron	8.21	J	A	mg/Kg	7.7	20
SW6010B	MB 500-363316/1-A	MBLK	Nickel	0.36	J	A	mg/Kg	0.27	1
SW6010B	MB 500-363571/1-A	MBLK	Chromium	0.38	J	A	mg/Kg	0.17	1
SW6010B	MB 500-363571/1-A	MBLK	Iron	8.44	J	A	mg/Kg	7.7	20
SW6010B	MB 500-363940/1-A	MBLK	Chromium	0.637	J	A	mg/Kg	0.17	1
SW6010B	MB 500-363940/1-A	MBLK	Nickel	0.284	J	A	mg/Kg	0.27	1
SW6010B	MB 500-363943/1-A	MBLK	Chromium	0.519	J	A	mg/Kg	0.17	1
SW6010B	MB 500-363943/1-A	MBLK	Copper	0.237	J	A	mg/Kg	0.22	1
SW6010B	MB 500-363943/1-A	MBLK	Iron	10	J	A	mg/Kg	7.7	20
SW6010B	MB 500-364230/1-A	MBLK	Chromium	0.302	J	A	mg/Kg	0.17	1
SW6010B	MB 500-365146/1-A	MBLK	Calcium	10.1	J	A	mg/Kg	6.4	20
SW6010B	MB 500-365146/1-A	MBLK	Chromium	0.249	J	A	mg/Kg	0.17	1
SW6010B_TCLP	LB 500-363172/1-C	MBLK	Boron	0.0659	J	A	mg/L	0.05	0.5
SW6010B_TCLP	LB 500-363365/1-B	MBLK	Zinc	0.026	J	A	mg/L	0.02	0.5
SW6010B_TCLP	LB 500-363370/1-B	MBLK	Zinc	0.0315	J	A	mg/L	0.02	0.5
SW6010B_TCLP	LB 500-363481/1-B	MBLK	Boron	0.0521	J	A	mg/L	0.05	0.5
SW6010B_TCLP	LB 500-363481/1-B	MBLK	Zinc	0.0231	J	A	mg/L	0.02	0.5
SW6010B_TCLP	LB 500-363729/1-D	MBLK	Zinc	0.105	J	A	mg/L	0.02	0.5
SW6010B_TCLP	LB 500-363730/1-C	MBLK	Zinc	0.0968	J	A	mg/L	0.02	0.5
SW6010B_TCLP	LB 500-365091/1-B	MBLK	Lead	0.0471		A	mg/L	0.0075	0.0075
SW6020A	MB 500-364441/1-A	MBLK	Iron	0.113		A	mg/L	0.026	0.1
SW6020A	MB 500-364441/1-A	MBLK	Zinc	0.00954	J	A	mg/L	0.0046	0.02
SW7471B	MB 500-365139/12-A	MBLK	Mercury	0.0117	J	A	mg/Kg	0.0088	0.017
SW8260B	MB 500-363745/7	MBLK	2-Hexanone	0.00505		A	mg/Kg	0.0016	0.005

**Table 2A - List of Samples Qualified for Method Blank Contamination**

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Units	Sample Flag	Units
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	10	B	0.52	1314V3-01-B37 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	11	B	0.56	1314V3-01-B40 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	11	B	0.58	1314V3-01-B12 (6-11)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	13	B	0.57	1314V3-01-B43 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	13	B	0.57	1314V3-01-B41 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	13	B	0.6	1314V3-01-B14 (6-12)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	15	B	0.59	1314V3-01-B42 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	16	B	0.55	1314V3-01-B14 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	7.8	B	0.54	1314V3-01-B17 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	8.1	B	0.53	1314V3-01-B16 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	8.1	B	0.54	1314V3-01-B15 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	8.3	B	0.55	1314V3-01-B12 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	8.3	B	0.56	1314V3-01-B22 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	8.9	B	0.54	1314V3-01-B15 (7-13)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	9.2	B	0.54	1314V3-01-B18 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	9.5	B	0.51	1314V3-01-B13 (0-5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363008/1-A	Solid	Chromium	0.327	9.7	B	0.54	1314V3-01-B19 (0-5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	11000	B	12	1314V3-66-B01 (0-7)D	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	15000	B	12	1314V3-66-B01 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	22000	B	11	1314V3-67-B01 (0-5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	23000	B	12	1314V3-75-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	2600	B	12	1314V3-66-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	2700	B	11	1314V3-67-B08 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	29000	B	11	1314V3-67-B03 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	4000	B	11	1314V3-67-B07 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	42000	B	11	1314V3-67-B05 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	48000	B	10	1314V3-74-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	6400	B	11	1314V3-67-B06 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	6500	B	11	1314V3-67-B04 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	8600	B	12	1314V3-67-B04 (7-13)	mg/Kg	Not Qualified	mg/Kg

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Units	Sample Flag	Units
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	8800	B	10	1314V3-67-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Calcium	7.21	9200	B	12	1314V3-67-B01 (5-9)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	10	B	0.53	1314V3-67-B06 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	10	B	0.55	1314V3-67-B04 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	10	B	0.58	1314V3-67-B01 (5-9)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	10	B	0.61	1314V3-66-B01 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	11	B	0.5	1314V3-67-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	11	B	0.53	1314V3-67-B05 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	11	B	0.56	1314V3-67-B03 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	11	B	0.58	1314V3-66-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	11	B	0.59	1314V3-67-B04 (7-13)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	11	B	0.59	1314V3-66-B01 (0-7)D	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	12	B	0.55	1314V3-67-B08 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	13	B	0.58	1314V3-75-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	8.8	B	0.54	1314V3-67-B01 (0-5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	9.6	B	0.53	1314V3-67-B07 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Chromium	0.8	10	B F1	0.51	1314V3-74-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	11000	B	10	1314V3-67-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	11000	B	11	1314V3-67-B07 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	11000	B	12	1314V3-67-B01 (5-9)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	11000	B	11	1314V3-67-B01 (0-5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	13000	B	11	1314V3-67-B06 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	14000	B	11	1314V3-67-B03 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	15000	B	11	1314V3-67-B08 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	12000	B ^	12	1314V3-67-B04 (7-13)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	13000	B ^	10	1314V3-74-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	13000	B ^	11	1314V3-67-B05 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	13000	B ^	12	1314V3-66-B01 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	13000	B ^	12	1314V3-66-B01 (0-7)D	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	13000	B ^	11	1314V3-67-B04 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	15000	B ^	12	1314V3-66-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	15000	B ^	11	1314V3-67-B08 (0-4)	mg/Kg	Not Qualified	mg/Kg



Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Units	Sample Flag	Units
SW6010B	MB 500-363316/1-A	Solid	Iron	8.21	17000	B ^	12	1314V3-75-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	11	B	0.53	1314V3-67-B07 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	11	B	0.58	1314V3-67-B01 (5-9)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	11	B	0.53	1314V3-67-B06 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	12	B	0.54	1314V3-67-B01 (0-5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	12	B	0.58	1314V3-66-B01 (0-7)D	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	12	B	0.59	1314V3-67-B04 (7-13)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	14	B	0.55	1314V3-67-B08 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	14	B	0.61	1314V3-66-B01 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	15	B	0.56	1314V3-67-B03 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	15	B	0.58	1314V3-75-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	17	B	0.5	1314V3-67-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	18	B	0.58	1314V3-66-B02 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	19	B	0.53	1314V3-67-B05 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	9	B	0.55	1314V3-67-B04 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363316/1-A	Solid	Nickel	0.36	13	F1 B	0.51	1314V3-74-B01 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	11	B	0.52	1314V3-01-B23 (0-8)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	11	B	0.55	1314V3-01-B25 (0-8.2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	11	B	0.57	1314V3-01-B33 (0-2.5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	12	B	0.47	1314V3-01-B29 (0-5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	12	B	0.53	1314V3-01-B38 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	12	B	0.53	1314V3-01-B21 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	13	B	0.5	1314V3-01-B39 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	15	B	0.55	1314V3-01-B24 (0-4.5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	26	B	0.45	1314V3-01-B26 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Chromium	0.38	9.6	B	0.48	1314V3-01-B32 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	10000	B	10	1314V3-01-B23 (0-8)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	11000	B	9.6	1314V3-01-B32 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	12000	B	11	1314V3-01-B38 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	12000	B	11	1314V3-01-B33 (0-2.5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	13000	B	11	1314V3-01-B21 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	13000	B	9.5	1314V3-01-B29 (0-5)	mg/Kg	Not Qualified	mg/Kg

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Units	Sample Flag	Units
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	14000	B	10	1314V3-01-B39 (0-4)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	14000	B	11	1314V3-01-B25 (0-8.2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	14000	B	11	1314V3-01-B24 (0-4.5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363571/1-A	Solid	Iron	8.44	15000	B	9	1314V3-01-B26 (0-2)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363940/1-A	Solid	Chromium	0.637	11	B	0.56	1314V3-01-B31 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363940/1-A	Solid	Chromium	0.637	12	B	0.51	1314V3-01-B30 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363940/1-A	Solid	Chromium	0.637	13	B	0.45	1314V3-01-B20 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363940/1-A	Solid	Nickel	0.284	13	B	0.45	1314V3-01-B20 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363940/1-A	Solid	Nickel	0.284	14	B	0.51	1314V3-01-B30 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363940/1-A	Solid	Nickel	0.284	14	B	0.56	1314V3-01-B31 (0-6)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	10	B	0.48	1314V3-01-B35 (14-20)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	12	B	0.46	1314V3-01-B35 (0-7)D	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	12	B	0.5	1314V3-01-B35 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	12	B	0.5	1314V3-01-B28 (0-4.5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	13	B	0.51	1314V3-01-B27 (15-22)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	26	B	0.46	1314V3-01-B27 (0-8)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	8.4	B	0.56	1314V3-01-B27 (8-15)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Chromium	0.519	8.5	B	0.47	1314V3-01-B35 (7-14)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	11	B	0.46	1314V3-01-B35 (0-7)D	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	11	B	0.48	1314V3-01-B35 (14-20)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	11	B	0.5	1314V3-01-B35 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	11	B	0.5	1314V3-01-B28 (0-4.5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	12	B	0.51	1314V3-01-B27 (15-22)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	17	B	0.56	1314V3-01-B27 (8-15)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	51	B	0.46	1314V3-01-B27 (0-8)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Copper	0.237	7.6	B	0.47	1314V3-01-B35 (7-14)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Iron	10	10000	B	10	1314V3-01-B28 (0-4.5)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Iron	10	10000	B	9.2	1314V3-01-B35 (0-7)D	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Iron	10	11000	B	10	1314V3-01-B35 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Iron	10	11000	B	9.6	1314V3-01-B35 (14-20)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Iron	10	12000	B	10	1314V3-01-B27 (15-22)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Iron	10	12000	B	11	1314V3-01-B27 (8-15)	mg/Kg	Not Qualified	mg/Kg

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Units	Sample Flag	Units
SW6010B	MB 500-363943/1-A	Solid	Iron	10	12000	B	9.2	1314V3-01-B27 (0-8)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-363943/1-A	Solid	Iron	10	7600	B	9.4	1314V3-01-B35 (7-14)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-364230/1-A	Solid	Chromium	0.302	10	B	0.54	1314V3-01-B34 (0-7)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-364230/1-A	Solid	Chromium	0.302	10	B	0.56	1314V3-01-B34 (7-14)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-364230/1-A	Solid	Chromium	0.302	11	B	0.56	1314V3-01-B34 (14-20)	mg/Kg	Not Qualified	mg/Kg
SW7471B	MB 500-365139/12-A	Solid	Mercury	0.0117	0.023	B	0.019	1314V3-01-B36 (24-28)	mg/Kg	U Flag	mg/Kg
SW7471B	MB 500-365139/12-A	Solid	Mercury	0.0117	0.031	B	0.019	1314V3-01-B36 (16-24)	mg/Kg	U Flag	mg/Kg
SW7471B	MB 500-365139/12-A	Solid	Mercury	0.0117	0.033	B	0.017	1314V3-01-B36 (8-16)	mg/Kg	U Flag	mg/Kg
SW7471B	MB 500-365139/12-A	Solid	Mercury	0.0117	0.038	B	0.018	1314V3-01-B36 (0-8)	mg/Kg	U Flag	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Calcium	10.1	21000	B	11	1314V3-01-B36 (8-16)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Calcium	10.1	38000	B	11	1314V3-01-B36 (16-24)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Calcium	10.1	4000	B	11	1314V3-01-B36 (0-8)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Calcium	10.1	47000	B	11	1314V3-01-B36 (24-28)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Chromium	0.249	12	B	0.53	1314V3-01-B36 (0-8)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Chromium	0.249	13	B	0.57	1314V3-01-B36 (8-16)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Chromium	0.249	5.5	B	0.57	1314V3-01-B36 (24-28)	mg/Kg	Not Qualified	mg/Kg
SW6010B	MB 500-365146/1-A	Solid	Chromium	0.249	9.7	B	0.56	1314V3-01-B36 (16-24)	mg/Kg	Not Qualified	mg/Kg

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Units	Sample Flag	Units
SW6010B_TCLP	LB 500-363172/1-C	Solid	Boron	0.0659	0.061	J B	0.5	1314V3-75-B01 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363172/1-C	Solid	Boron	0.0659	0.078	J B	0.5	1314V3-74-B01 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.02	J B	0.5	1314V3-01-B12 (6-11)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.021	J B	0.5	1314V3-01-B12 (0-6)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.024	J B	0.5	1314V3-01-B15 (0-7)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.024	J B	0.5	1314V3-01-B40 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.025	J B	0.5	1314V3-01-B13 (0-5)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.029	J B	0.5	1314V3-01-B14 (0-6)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.034	J B	0.5	1314V3-01-B16 (0-6)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.04	J B	0.5	1314V3-01-B15 (7-13)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.044	J B	0.5	1314V3-01-B37 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.045	J B	0.5	1314V3-01-B14 (6-12)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.046	J B	0.5	1314V3-01-B18 (0-7)	mg/L	U Flag	mg/L

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Units	Sample Flag	Units
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.048	J B	0.5	1314V3-01-B41 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.068	J B	0.5	1314V3-01-B19 (0-5)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.11	J B	0.5	1314V3-01-B43 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363365/1-B	Solid	Zinc	0.026	0.15	J B	0.5	1314V3-01-B42 (0-2)	mg/L	Not Qualified	mg/L
SW6010B_TCLP	LB 500-363370/1-B	Solid	Zinc	0.0315	0.022	J B	0.5	1314V3-67-B04 (0-7)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363370/1-B	Solid	Zinc	0.0315	0.024	J B	0.5	1314V3-67-B06 (0-4)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363370/1-B	Solid	Zinc	0.0315	0.033	J B	0.5	1314V3-66-B01 (0-7)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363370/1-B	Solid	Zinc	0.0315	0.2	J B	0.5	1314V3-67-B01 (0-5)	mg/L	Not Qualified	mg/L
SW6010B_TCLP	LB 500-363370/1-B	Solid	Zinc	0.0315	0.28	J B	0.5	1314V3-67-B01 (5-9)	mg/L	Not Qualified	mg/L
SW6010B_TCLP	LB 500-363370/1-B	Solid	Zinc	0.0315	0.42	J B	0.5	1314V3-67-B04 (7-13)	mg/L	Not Qualified	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.052	J B	0.5	1314V3-01-B23 (0-8)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.055	J B	0.5	1314V3-01-B29 (0-5)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.058	J B	0.5	1314V3-01-B26 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.059	J B	0.5	1314V3-01-B25 (0-8.2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.066	J B	0.5	1314V3-01-B24 (0-4.5)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.073	J B	0.5	1314V3-01-B21 (0-6)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.079	J B	0.5	1314V3-01-B38 (0-4)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.079	J B	0.5	1314V3-01-B33 (0-2.5)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Boron	0.0521	0.098	J B	0.5	1314V3-01-B32 (0-6)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Zinc	0.0231	0.02	J B	0.5	1314V3-01-B24 (0-4.5)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Zinc	0.0231	0.022	J B	0.5	1314V3-01-B33 (0-2.5)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Zinc	0.0231	0.023	J B	0.5	1314V3-01-B26 (0-2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Zinc	0.0231	0.023	J B	0.5	1314V3-01-B25 (0-8.2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Zinc	0.0231	0.032	J B	0.5	1314V3-01-B25 (0-8.2)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363481/1-B	Solid	Zinc	0.0231	0.059	J B	0.5	1314V3-01-B38 (0-4)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363729/1-D	Solid	Zinc	0.105	0.023	J B	0.5	1314V3-01-B31 (0-6)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363730/1-C	Solid	Zinc	0.0968	0.97	B	0.5	1314V3-01-B27 (0-8)	mg/L	Not Qualified	mg/L
SW6010B_TCLP	LB 500-363730/1-C	Solid	Zinc	0.0968	0.028	J B	0.5	1314V3-01-B35 (14-20)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363730/1-C	Solid	Zinc	0.0968	0.031	J B	0.5	1314V3-01-B35 (7-14)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363730/1-C	Solid	Zinc	0.0968	0.036	J B	0.5	1314V3-01-B27 (15-22)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363730/1-C	Solid	Zinc	0.0968	0.058	J B	0.5	1314V3-01-B27 (8-15)	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363730/1-C	Solid	Zinc	0.0968	0.11	J B	0.5	1314V3-01-B35 (0-7)D	mg/L	U Flag	mg/L
SW6010B_TCLP	LB 500-363730/1-C	Solid	Zinc	0.0968	0.15	J B	0.5	1314V3-01-B35 (0-7)	mg/L	U Flag	mg/L

**Table 3 - List of Samples with Surrogates outside Control Limits**

Method	Sample ID	Sample Type	Analyte	Rec.	Low Limit	High Limit	Dil Fac	Sample Qual.	No Surrogates Out
SW8270D	1314V3-01-B27 (0-8)	SAMP	Terphenyl-d14	164	25	150	1	None	1
SW8270D	1314V3-01-B27 (8-15)	SAMP	Terphenyl-d14	163	25	150	1	None	1
SW8270D	1314V3-01-B27 (8-15)	DL	2,4,6-Tribromophenol	0	25	130	100	None -- Diluted Out	6
SW8270D	1314V3-01-B27 (8-15)	DL	2-Fluorobiphenyl	0	42	115	100	None -- Diluted Out	6
SW8270D	1314V3-01-B27 (8-15)	DL	2-Fluorophenol	0	40	130	100	None -- Diluted Out	6
SW8270D	1314V3-01-B27 (8-15)	DL	Nitrobenzene-d5	0	33	124	100	None -- Diluted Out	6
SW8270D	1314V3-01-B27 (8-15)	DL	Phenol-d5	0	36	123	100	None -- Diluted Out	6
SW8270D	1314V3-01-B27 (8-15)	DL	Terphenyl-d14	0	25	150	100	None -- Diluted Out	6
SW8270D	1314V3-66-B01 (0-7)	SAMP	Phenol-d5	124	36	123	1	None	1
SW8260B	1314V3-74-B01 (0-2)	SAMP	4-Bromofluorobenzene (Surr)	128	70	120	1	None – High and ND	1

**Table 4 - List MS/MSD Recoveries and RPDs Outside Control Limits**

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Qualifier	Sample Qual.
SW8270D	1314V3-01-B38 (0-4)	MSD	1,2-Dichlorobenzene		1.55	42	1	56	110	F1 F2	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	1,3-Dichlorobenzene		1.53	55	1	56	110	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	2,4,5-Trichlorophenol		1.53	33	1	42	119	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	2,4,5-Trichlorophenol		1.55	33	1	42	119	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	2,4,6-Trichlorophenol		1.53	24	1	50	120	J F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	2,4,6-Trichlorophenol		1.55	24	1	50	120	J F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	2,4-Dinitrotoluene		1.53	44	1	59	119	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	2-Methylnaphthalene		1.55	158	1	55	120	F1 F2	None – High and ND
SW8270D	1314V3-01-B38 (0-4)	MS	3 & 4 Methylphenol		1.53	27	1	55	124	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	3 & 4 Methylphenol		1.55	22	1	55	124	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	4-Bromophenyl phenyl ether		1.53	43	1	61	124	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	4-Chloroaniline		1.55	151	1	10	150	F1	None – High and ND
SW8270D	1314V3-01-B38 (0-4)	MSD	4-Chlorophenyl phenyl ether		1.55	36	1	61	111	F1 F2	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	Acenaphthene		1.55	25	1	52	113	F1 F2	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	Anthracene		1.53	54	1	57	118	F1	UJ Flag

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Qualifier	Sample Qual.
SW8270D	1314V3-01-B38 (0-4)	MS	Bis(2-chloroethyl)ether		1.53	144	1	53	116	F1	None – High and ND
SW8270D	1314V3-01-B38 (0-4)	MSD	Bis(2-chloroethyl)ether		1.55	147	1	53	116	F1	None – High and ND
SW8270D	1314V3-01-B38 (0-4)	MSD	Dibenzofuran		1.55	30	1	59	110	F1 F2	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	Diethyl phthalate		1.55	40	1	58	117	F1 F2	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	Fluoranthene	0.028	1.55	130	1	61	124	F1 F2	J Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	Fluorene		1.55	37	1	56	115	F1 F2	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	Hexachlorobenzene		1.53	48	1	62	126	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	Hexachlorocyclopentadiene		1.53	0	1	10	116	U F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	Hexachlorocyclopentadiene		1.55	0	1	10	116	U F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	Hexachloroethane		1.53	117	1	54	111	F1	None – High and ND
SW8270D	1314V3-01-B38 (0-4)	MS	N-Nitrosodi-n-propylamine		1.53	28	1	56	119	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	N-Nitrosodiphenylamine		1.53	47	1	62	117	F1	UJ Flag
SW8270D	1314V3-01-B38 (0-4)	MS	Phenanthrene	0.0098	1.53	55	1	58	125	F1	J Flag
SW8270D	1314V3-01-B43 (0-2)	MSD	2,4-Dinitrophenol		3.19	0	1	10	110	U F1	UJ Flag
SW8270D	1314V3-01-B43 (0-2)	MS	3,3'-Dichlorobenzidine		1.59	38	1	40	110	F1	UJ Flag
SW8270D	1314V3-01-B43 (0-2)	MSD	3,3'-Dichlorobenzidine		1.59	31	1	40	110	F1	UJ Flag
SW8270D	1314V3-01-B43 (0-2)	MS	Benzo[g,h,i]perylene	0.091	1.59	45	1	55	134	F1	J Flag
SW8270D	1314V3-01-B43 (0-2)	MSD	Benzo[g,h,i]perylene	0.091	1.59	54	1	55	134	F1	J Flag
SW8270D	1314V3-01-B43 (0-2)	MSD	Bis(2-ethylhexyl) phthalate		1.59	119	1	62	117	F1	None – High and ND
SW8270D	1314V3-01-B43 (0-2)	MSD	Butyl benzyl phthalate		1.59	118	1	61	115	F1	None – High and ND
SW8270D	1314V3-01-B43 (0-2)	MS	Dibenz(a,h)anthracene		1.59	57	1	61	134	F1	UJ Flag
SW8270D	1314V3-01-B43 (0-2)	MSD	Dibenz(a,h)anthracene		1.59	55	1	61	134	F1	UJ Flag
SW8270D	1314V3-01-B43 (0-2)	MSD	Hexachlorocyclopentadiene		1.59	0	1	10	116	U F1	UJ Flag
SW8270D	1314V3-01-B43 (0-2)	MSD	Pyrene	0.12	1.59	118	1	60	115	F1	J Flag
SW8270D	1314V3-66-B01 (0-7)	MS	2,4-Dinitrophenol		3.08	0	1	10	110	U F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MSD	2,4-Dinitrophenol		3.26	0	1	10	110	U F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MS	4,6-Dinitro-2-methylphenol		3.08	0	1	10	110	U F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MSD	4,6-Dinitro-2-methylphenol		3.26	0	1	10	110	U F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MS	Benzo[g,h,i]perylene		1.54	47	1	55	134	F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MSD	Benzo[g,h,i]perylene		1.63	43	1	55	134	F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MS	Bis(2-ethylhexyl) phthalate		1.54	126	1	62	117	F1	None – High and ND
SW8270D	1314V3-66-B01 (0-7)	MSD	Bis(2-ethylhexyl) phthalate		1.63	123	1	62	117	F1	None – High and ND

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Qualifier	Sample Qual.
SW8270D	1314V3-66-B01 (0-7)	MS	Butyl benzyl phthalate		1.54	121	1	61	115	F1	None – High and ND
SW8270D	1314V3-66-B01 (0-7)	MS	Dibenz(a,h)anthracene		1.54	59	1	61	134	F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MSD	Dibenz(a,h)anthracene		1.63	55	1	61	134	F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MS	Hexachlorocyclopentadiene		1.54	0	1	10	116	U F1	UR Flag
SW8270D	1314V3-66-B01 (0-7)	MSD	Hexachlorocyclopentadiene		1.63	0	1	10	116	U F1	UR Flag
SW8270D	1314V3-66-B01 (0-7)	MS	Pentachlorophenol		3.08	0	1	12	116	U F1	UJ Flag
SW8270D	1314V3-66-B01 (0-7)	MSD	Pentachlorophenol		3.26	0	1	12	116	U F1	UJ Flag
SW6010B_SPLP	1314V3-01-B22 (0-7)	MS	Manganese	0.94	0.5	156	1	50	150	F1	J Flag
SW6010B_SPLP	1314V3-67-B06 (0-4)	MS	Manganese	0.48	0.5	170	1	50	150	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MS	Antimony		26.9	22	1	75	125	F1	UJ Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Antimony		27	21	1	75	125	F1	UJ Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Barium	78	108	71	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MS	Boron	2.1	53.8	57	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Boron	2.1	54	61	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MS	Calcium	16000	538	-1482	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MSD	Calcium	16000	540	-1185	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MSD	Copper	8	13.5	67	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MS	Iron	9400	53.8	4664	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MSD	Iron	9400	54	2889	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MS	Lead	7.4	5.38	149	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MS	Magnesium	9800	538	-841	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MSD	Magnesium	9800	540	-617	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MS	Manganese	510	26.9	62	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MSD	Manganese	510	27	-76	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B22 (0-7)	MS	Potassium	680	538	127	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MS	Selenium	0.57	5.38	64	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Selenium	0.57	5.4	63	1	75	125	F1	J Flag
SW6010B	1314V3-01-B22 (0-7)	MS	Silver		2.69	71	1	75	125	F1	UJ Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Silver		2.7	72	1	75	125	F1	UJ Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Sodium	1200	540	24	1	75	125	F1 F2	J Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Zinc	35	27	74	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MS	Antimony		26.1	20	1	75	125	F1	UJ Flag

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Qualifier	Sample Qual.
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Antimony		24.8	20	1	75	125	F1	UJ Flag
SW6010B	1314V3-01-B28 (0-4.5)	MS	Barium	51	104	71	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MS	Boron	2.6	52.2	61	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Boron	2.6	49.5	51	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Cadmium	0.14	2.48	73	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MS	Calcium	19000	522	3442	1	75	125	E 4	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Calcium	19000	495	-1387	1	75	125	4 F2	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MS	Iron	10000	52.2	4288	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Iron	10000	49.5	3573	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MS	Magnesium	11000	522	1824	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Magnesium	11000	495	-587	1	75	125	4 F2	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MS	Manganese	180	26.1	412	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Manganese	180	24.8	-66	1	75	125	4 F2	None -- 4X
SW6010B	1314V3-01-B28 (0-4.5)	MS	Potassium	740	522	163	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MS	Selenium	0.52	5.22	60	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Selenium	0.52	4.95	58	1	75	125	F1	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Silver		2.48	67	1	75	125	F1	UJ Flag
SW6010B	1314V3-01-B34 (14-20)	MS	Antimony	0.34	27.4	21	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MSD	Antimony	0.34	27.2	21	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MS	Arsenic	3	5.49	150	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MS	Boron	2.5	54.9	62	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MSD	Boron	2.5	54.3	65	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MS	Cobalt	6.8	27.4	131	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MS	Iron	12000	54.9	2574	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B34 (14-20)	MSD	Iron	12000	54.3	2243	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B34 (14-20)	MS	Magnesium	15000	549	161	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B34 (14-20)	MSD	Magnesium	15000	543	228	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B34 (14-20)	MS	Manganese	250	27.4	61	1	75	125	4	None -- 4X
SW6010B	1314V3-01-B34 (14-20)	MS	Nickel	17	27.4	138	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MS	Potassium	750	549	138	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MSD	Potassium	750	543	155	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MS	Selenium	0.41	5.49	71	1	75	125	F1	J Flag



Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Qualifier	Sample Qual.
SW6010B	1314V3-01-B34 (14-20)	MSD	Selenium	0.41	5.43	70	1	75	125	F1	J Flag
SW6010B	1314V3-01-B34 (14-20)	MSD	Silver		2.72	74	1	75	125	F1	UJ Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Antimony	0.73	27.4	15	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MSD	Antimony	0.73	25.9	18	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Barium	43	110	70	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Beryllium	0.45	2.74	74	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Boron	5	54.9	66	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Cadmium	0.24	2.74	65	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Calcium	48000	549	-1578	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MSD	Calcium	48000	518	-508	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MS	Chromium	10	11	68	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Cobalt	5.6	27.4	64	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Iron	13000	54.9	-641	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MSD	Iron	13000	51.8	3431	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MS	Magnesium	24000	549	-746	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MSD	Magnesium	24000	518	-183	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MS	Manganese	330	27.4	9	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MSD	Manganese	330	25.9	44	1	75	125	4	None -- 4X
SW6010B	1314V3-74-B01 (0-2)	MS	Nickel	13	27.4	64	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Potassium	1400	549	170	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MSD	Potassium	1400	518	233	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Selenium	0.31	5.49	63	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Thallium	0.98	5.49	67	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MS	Zinc	34	27.4	49	1	75	125	F1	J Flag
SW6010B	1314V3-74-B01 (0-2)	MSD	Zinc	34	25.9	62	1	75	125	F1	J Flag

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW6010B	1314V3-01-B22 (0-7)	DUP	Arsenic	24	20	None -- <5X PQL
SW6010B	1314V3-01-B22 (0-7)	DUP	Barium	23	20	J Flag
SW6010B	1314V3-01-B22 (0-7)	DUP	Calcium	56	20	J Flag
SW6010B	1314V3-01-B22 (0-7)	DUP	Magnesium	54	20	J Flag
SW6010B	1314V3-01-B22 (0-7)	DUP	Manganese	27	20	J Flag

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW6010B	1314V3-01-B22 (0-7)	DUP	Selenium	43	20	None -- <5X PQL
SW6010B	1314V3-01-B22 (0-7)	MSD	Lead	28	20	J Flag
SW6010B	1314V3-01-B22 (0-7)	MSD	Sodium	22	20	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	DUP	Boron	31	20	None -- <5X PQL
SW6010B	1314V3-01-B28 (0-4.5)	DUP	Calcium	59	20	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	DUP	Magnesium	50	20	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	DUP	Manganese	36	20	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Calcium	99	20	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Magnesium	90	20	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Manganese	55	20	J Flag
SW6010B	1314V3-01-B28 (0-4.5)	MSD	Potassium	27	20	J Flag
SW6010B	1314V3-01-B34 (14-20)	DUP	Selenium	23	20	None -- <5X PQL
SW6010B	1314V3-01-B34 (14-20)	MSD	Arsenic	43	20	J Flag
SW6010B	1314V3-01-B34 (14-20)	MSD	Cobalt	28	20	J Flag
SW6010B	1314V3-01-B34 (14-20)	MSD	Nickel	28	20	J Flag
SW8270D	1314V3-01-B38 (0-4)	MSD	1,2-Dichlorobenzene	52	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	2,4-Dinitrotoluene	44	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	2-Methylnaphthalene	58	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	3,3'-Dichlorobenzidine	34	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	3-Nitroaniline	34	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	4,6-Dinitro-2-methylphenol	51	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	4-Bromophenyl phenyl ether	46	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	4-Chlorophenyl phenyl ether	77	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Acenaphthene	94	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Anthracene	49	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Carbazole	43	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Dibenzofuran	86	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Diethyl phthalate	71	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Di-n-butyl phthalate	41	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Di-n-octyl phthalate	41	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Fluoranthene	59	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Fluorene	76	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Hexachlorobenzene	62	30	None -- <5X PQL

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8270D	1314V3-01-B38 (0-4)	MSD	Hexachloroethane	47	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	N-Nitrosodi-n-propylamine	94	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	N-Nitrosodiphenylamine	32	30	None -- <5X PQL
SW8270D	1314V3-01-B38 (0-4)	MSD	Phenanthrene	56	30	None -- <5X PQL
SW8270D	1314V3-01-B43 (0-2)	MSD	4,6-Dinitro-2-methylphenol	70	30	None -- <5X PQL
SW7471B	1314V3-66-B01 (0-7)	DUP	Mercury	27	20	None -- <5X PQL
SW6010B_SPLP	1314V3-67-B06 (0-4)	DUP	Manganese	33	20	J Flag
SW6010B	1314V3-74-B01 (0-2)	DUP	Antimony	71	20	None -- <5X PQL

**Table 5 - List LCS Recoveries outside Control Limits**

Method	Sample ID	Analyte	BatchID	Rec.	Low Limit	High Limit	No of Samples	Notes
SW8270D	LCS 500-363857/2-A	Carbazole	500-363857	139	65	137	2	None – High and Non-Detect
SW8270D	LCS 500-363857/2-A	2,4-Dinitrophenol	500-363857	0	10	110	2	UR Flag
SW8270D	LCS 500-364109/2-A	Hexachlorocyclopentadiene	500-364109	5	10	116	13	UR Flag
SW8270D	LCS 500-364515/2-A	2,4-Dinitrophenol	500-364515	7	10	110	8	UR Flag
SW8270D	LCS 500-364515/2-A	4-Nitroaniline	500-364515	152	55	146	8	None – High and Non-Detect
SW8270D	LCS 500-364515/2-A	Hexachlorocyclopentadiene	500-364515	7	10	116	8	UR Flag
SW8270D	LCS 500-365830/2-A	2,4-Dinitrophenol	500-365830	0	10	110	4	UR Flag

**Table 6 – Samples that were Re-analyzed**

Sample ID	Method	Sample Type	Notes	Dilution	No. of Analytes
1314V3-01-B15 (0-7)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B16 (0-6)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B17 (0-7)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B18 (0-7)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B21 (0-6)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B23 (0-8)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B27 (0-8)	SW8270D	SAMP	Diluted to bring benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenz(a,h)anthracene, indeno[1,2,3-cd]pyrene, and pyrene within the calibration curve.	10	8
1314V3-01-B27 (8-15)	SW8270D	SAMP	Diluted to bring 2-methylnaphthalene, acenaphthene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, carbazole, chrysene, dibenz(a,h)anthracene, dibenzofuran, fluorene, indeno[1,2,3-cd]pyrene, naphthalene, and pyrene within the calibration curve.	20	16
1314V3-01-B27 (8-15)	SW8270D	SAMP	Diluted to bring fluoranthene and phenanthrene within the calibration curve.	100	2
1314V3-01-B29 (0-5)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B32 (0-6)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B33 (0-2.5)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B34 (7-14)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1
1314V3-01-B37 (0-2)	SW6010B	SAMP	Diluted to bring calcium within the calibration curve.	10	1

**Table 7 – Summary of Field Duplicate Results**

Method	Analyte	Unit	Matrix	PQL	Anal Type	1314V3-01-B35 (0-7)	1314V3-01-B35 (0-7)D	RPD	RPD Rating	Sample Qual
SW8270D	2-Methylnaphthalene	mg/Kg	Solid	0.077	A	ND	0.0092	NC	--	--
SW8270D	Acenaphthene	mg/Kg	Solid	0.038	A	ND	0.013	NC	--	--
SW8270D	Anthracene	mg/Kg	Solid	0.038	A	ND	0.0074	NC	--	--
SW6010B	Arsenic	mg/Kg	Solid	0.5	A	4.1	4.3	4.8%	Good	None
SW6010B	Barium	mg/Kg	Solid	0.5	A	62	61	1.6%	Good	None
SW6010B_TCLP	Barium	mg/L	Solid	0.5	A	1.2	0.92	26.4%	Good	None
SW8270D	Benzo[a]anthracene	mg/Kg	Solid	0.038	A	0.019	0.02	5.1%	Good	None
SW8270D	Benzo[a]pyrene	mg/Kg	Solid	0.038	A	0.024	0.021	13.3%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	1314V3-01-B35 (0-7)	1314V3-01-B35 (0-7)D	RPD	RPD Rating	Sample Qual
SW8270D	Benzo[b]fluoranthene	mg/Kg	Solid	0.038	A	0.037	0.035	5.6%	Good	None
SW8270D	Benzo[k]fluoranthene	mg/Kg	Solid	0.038	A	0.018	0.014	25.0%	Good	None
SW6010B	Beryllium	mg/Kg	Solid	0.2	A	0.37	0.45	19.5%	Good	None
SW6010B	Boron	mg/Kg	Solid	2.5	A	2.3	3.2	32.7%	Good	None
SW6010B_TCLP	Boron	mg/L	Solid	0.5	A	0.097	0.085	13.2%	Good	None
SW6010B	Cadmium	mg/Kg	Solid	0.1	A	0.12	0.17	34.5%	Good	None
SW6010B_TCLP	Cadmium	mg/L	Solid	0.005	A	0.0027	0.0029	7.1%	Good	None
SW6010B	Calcium	mg/Kg	Solid	10	A	19000	15000	23.5%	Good	None
SW6010B	Chromium	mg/Kg	Solid	0.5	A	12	12	0.0%	Good	None
SW8270D	Chrysene	mg/Kg	Solid	0.038	A	0.02	0.022	9.5%	Good	None
SW6010B	Cobalt	mg/Kg	Solid	0.25	A	7.6	8.4	10.0%	Good	None
SW6010B_TCLP	Cobalt	mg/L	Solid	0.025	A	0.048	0.035	31.3%	Good	None
SW6010B	Copper	mg/Kg	Solid	0.5	A	11	11	0.0%	Good	None
SW8270D	Fluoranthene	mg/Kg	Solid	0.038	A	0.037	0.046	21.7%	Good	None
SW8270D	Fluorene	mg/Kg	Solid	0.038	A	ND	0.013	NC	--	--
SW8270D	Indeno[1,2,3-cd]pyrene	mg/Kg	Solid	0.038	A	0.014	0.013	7.4%	Good	None
SW6010B	Iron	mg/Kg	Solid	10	A	11000	10000	9.5%	Good	None
SW6010B_TCLP	Iron	mg/L	Solid	0.4	A	ND	0.24	NC	--	--
SW6010B	Lead	mg/Kg	Solid	0.25	A	9.7	17	54.7%	Good	None
SW6010B_SPLP	Lead	mg/L	Solid	0.0075	A	0.031	NA	NC	--	--
SW6010B_TCLP	Lead	mg/L	Solid	0.0075	A	0.0093	ND	NC	--	--
SW6010B	Magnesium	mg/Kg	Solid	5	A	11000	8500	25.6%	Good	None
SW6010B	Manganese	mg/Kg	Solid	0.5	A	300	180	50.0%	Good	None
SW6010B_SPLP	Manganese	mg/L	Solid	0.025	A	0.21	0.36	52.6%	Good	None
SW6010B_TCLP	Manganese	mg/L	Solid	0.025	A	5.9	5.5	7.0%	Good	None
SW7471B	Mercury	mg/Kg	Solid	0.02	A	0.047	0.035	29.3%	Good	None
SW6010B	Nickel	mg/Kg	Solid	0.5	A	16	17	6.1%	Good	None
SW6010B_TCLP	Nickel	mg/L	Solid	0.025	A	0.046	0.04	14.0%	Good	None
EMoisture	Percent Moisture	%	Solid	0.1	A	17.1	15.9	7.3%	Good	None
EMoisture	Percent Solids	%	Solid	0.1	A	82.9	84.1	1.4%	Good	None
SW9045D	pH	SU	Solid	0.2	A	8.6	8.5	1.2%	Good	None
SW8270D	Phenanthrene	mg/Kg	Solid	0.038	A	0.023	0.042	58.5%	Good	None
SW6010B	Potassium	mg/Kg	Solid	25	A	530	660	21.8%	Good	None
SW8270D	Pyrene	mg/Kg	Solid	0.038	A	0.038	0.038	0.0%	Good	None
SW6010B	Selenium	mg/Kg	Solid	0.5	A	0.3	0.32	6.5%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	1314V3-01-B35 (0-7)	1314V3-01-B35 (0-7)D	RPD	RPD Rating	Sample Qual
SW6010B	Sodium	mg/Kg	Solid	50	A	190	160	17.1%	Good	None
SW6010B	Vanadium	mg/Kg	Solid	0.25	A	21	19	10.0%	Good	None
SW6010B	Zinc	mg/Kg	Solid	1	A	37	64	53.5%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	1314V3-66-B01 (0-7)	1314V3-66-B01 (0-7)D	RPD	RPD Rating	Sample Qual
SW6010B	Antimony	mg/Kg	Solid	1.2	A	ND	0.25	NC	--	--
SW6010B	Arsenic	mg/Kg	Solid	0.61	A	7.7	5.8	28.1%	Good	None
SW6010B	Barium	mg/Kg	Solid	0.61	A	58	58	0.0%	Good	None
SW6010B_TCLP	Barium	mg/L	Solid	0.5	A	0.65	0.65	0.0%	Good	None
SW8270D	Benzo[a]anthracene	mg/Kg	Solid	0.04	A	ND	0.029	NC	--	--
SW8270D	Benzo[a]pyrene	mg/Kg	Solid	0.04	A	ND	0.04	NC	--	--
SW8270D	Benzo[b]fluoranthene	mg/Kg	Solid	0.04	A	ND	0.059	NC	--	--
SW8270D	Benzo[g,h,i]perylene	mg/Kg	Solid	0.04	A	ND	0.023	NC	--	--
SW8270D	Benzo[k]fluoranthene	mg/Kg	Solid	0.04	A	ND	0.022	NC	--	--
SW6010B	Beryllium	mg/Kg	Solid	0.24	A	0.49	0.48	2.1%	Good	None
SW6010B	Boron	mg/Kg	Solid	3	A	2.5	2.5	0.0%	Good	None
SW6010B_TCLP	Boron	mg/L	Solid	0.5	A	0.053	0.087	48.6%	Good	None
SW6010B	Cadmium	mg/Kg	Solid	0.12	A	0.19	0.14	30.3%	Good	None
SW6010B	Calcium	mg/Kg	Solid	12	A	15000	11000	30.8%	Good	None
SW6010B	Chromium	mg/Kg	Solid	0.61	A	10	11	9.5%	Good	None
SW8270D	Chrysene	mg/Kg	Solid	0.04	A	ND	0.039	NC	--	--
SW6010B	Cobalt	mg/Kg	Solid	0.3	A	6.2	6.1	1.6%	Good	None
SW6010B	Copper	mg/Kg	Solid	0.61	A	11	9.6	13.6%	Good	None
SW8270D	Fluoranthene	mg/Kg	Solid	0.04	A	ND	0.088	NC	--	--
SW8270D	Indeno[1,2,3-cd]pyrene	mg/Kg	Solid	0.04	A	ND	0.029	NC	--	--
SW6010B	Iron	mg/Kg	Solid	12	A	13000	13000	0.0%	Good	None
SW6010B	Lead	mg/Kg	Solid	0.3	A	8.5	15	55.3%	Good	None
SW6010B_SPLP	Lead	mg/L	Solid	0.0075	A	NA	0.073	NC	--	J Flag
SW6010B_TCLP	Lead	mg/L	Solid	0.0075	A	ND	0.008	NC	--	--
SW6010B	Magnesium	mg/Kg	Solid	6.1	A	9600	5800	49.4%	Good	None
SW6010B	Manganese	mg/Kg	Solid	0.61	A	360	350	2.8%	Good	None
SW6010B_SPLP	Manganese	mg/L	Solid	0.025	A	0.58	NA	NC	--	J Flag
SW6010B_TCLP	Manganese	mg/L	Solid	0.025	A	0.27	0.14	63.4%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	1314V3-66-B01 (0-7)	1314V3-66-B01 (0-7)D	RPD	RPD Rating	Sample Qual
SW7471B	Mercury	mg/Kg	Solid	0.018	A	0.021	0.028	28.6%	Good	None
SW6010B	Nickel	mg/Kg	Solid	0.61	A	14	12	15.4%	Good	None
EMoisture	Percent Moisture	%	Solid	0.1	A	18.6	16.4	12.6%	Good	None
EMoisture	Percent Solids	%	Solid	0.1	A	81.4	83.6	2.7%	Good	None
SW9045D	pH	SU	Solid	0.2	A	8.6	8.8	2.3%	Good	None
SW8270D	Phenanthrene	mg/Kg	Solid	0.04	A	ND	0.033	NC	--	--
SW6010B	Potassium	mg/Kg	Solid	30	A	770	740	4.0%	Good	None
SW8270D	Pyrene	mg/Kg	Solid	0.04	A	ND	0.065	NC	--	--
SW6010B	Selenium	mg/Kg	Solid	0.61	A	ND	0.31	NC	--	--
SW6010B_TCLP	Selenium	mg/L	Solid	0.05	A	0.021	ND	NC	--	--
SW6010B	Sodium	mg/Kg	Solid	61	A	430	420	2.4%	Good	None
SW6010B	Thallium	mg/Kg	Solid	0.61	A	1.1	0.94	15.7%	Good	None
SW6010B	Vanadium	mg/Kg	Solid	0.3	A	23	22	4.4%	Good	None
SW6010B	Zinc	mg/Kg	Solid	1.2	A	28	28	0.0%	Good	None

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-120747-1  
Client Project/Site: IDOT - I-74 - WO 046

For:  
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### LINKS

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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: 500-120747-1

**Job ID: 500-120747-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-120747-1

#### Comments

No additional comments.

#### Receipt

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

#### Receipt Exceptions

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

#### GC/MS VOA

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

#### GC/MS Semi VOA

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

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

#### Metals

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

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

#### General Chemistry

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

#### Organic Prep

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

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-1**

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

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Lab Sample ID: 500-120747-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.046		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.012	J	0.040	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.12		0.040	0.0075	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.11		0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.061		0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.072		0.040	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: 500-120747-1

**Client Sample ID: 1314V3-01-B42 (0-2) (Continued)**

**Lab Sample ID: 500-120747-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.091		0.040	0.0088	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.031	J	0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.067		0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.036	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.043		0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.41	J	1.2	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.5		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	100		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	3.5		3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.38		0.12	0.034	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	8.1		0.30	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		12	4.6	mg/Kg	1	☼	6010B	Total/NA
Lead	130		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5200		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		30	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.94		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	430		59	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.087	mg/Kg	1	☼	6010B	Total/NA
Zinc	110		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	1.1		0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.0086		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.079		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.30		0.0075	0.0075	mg/L	1		6010B	SPLP East
Mercury	0.16		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

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

**Lab Sample ID: 500-120747-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.013	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.040		0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.032	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.019	J	0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.031	J	0.040	0.0087	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.1		0.57	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	73		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000		11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.57	0.099	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-3

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

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

## Lab Sample ID: 500-120747-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.024	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.026	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.018	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.019	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.025	J	0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.0		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	67		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	22000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.56	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.1		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	710		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.51	J	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	720		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	1.1		0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-4

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

## Client Sample ID: 1314V3-01-B37 (0-2)

## Lab Sample ID: 500-120747-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.8		0.52	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.52	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.21	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	2.4	J	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		100	33	mg/Kg	10	☼	6010B	Total/NA
Chromium	10	B	0.52	0.089	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.3		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	9.1		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.2	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.52	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.52	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	700		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	740		52	6.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.0	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.076	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.044	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.88		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	9.2		0.2	0.2	SU	1		9045D	Total/NA

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

## Lab Sample ID: 500-120747-6

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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-6

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

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

## Lab Sample ID: 500-120747-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0076	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	24		0.54	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.51		0.21	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	2.1	J	2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.098	J	0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	64000		110	35	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.2	B	0.54	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	8.6		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	82		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.78		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.029		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.046	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.021		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-7

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

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

## Lab Sample ID: 500-120747-8

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

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

## Lab Sample ID: 500-120747-9

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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



## Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

### Lab Sample ID: 500-120747-9

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

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

### Lab Sample ID: 500-120747-10

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

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

### Lab Sample ID: 500-120747-11

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-11

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

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

## Lab Sample ID: 500-120747-12

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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-12

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

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

## Lab Sample ID: 500-120747-13

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

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

## Lab Sample ID: 500-120747-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-14

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

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

## Lab Sample ID: 500-120747-15

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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

## Lab Sample ID: 500-120747-15

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

## Client Sample ID: 1314V3-01-B13 (0-5)

## Lab Sample ID: 500-120747-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.0066	J	0.034	0.0063	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0070	J	0.034	0.0068	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.0075	J	0.034	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.1		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.51	0.093	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.25		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	1.5	J	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.061	J	0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	8000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.5	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	5.1		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	7400		10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	6.4		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4000		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	180		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.8		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	350		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	250		51	6.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.1		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	22		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.87		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.025	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	0.028		0.017	0.0088	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

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

## Lab Sample ID: 500-120747-17

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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-17**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	9400		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	7.4	F1 F2	0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9800		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	510		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	680	F1	28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57	F1	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200	F1 F2	56	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	35	F1	1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.28		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.94	F1	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.057		0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Sample Summary

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

TestAmerica Job ID: 500-120747-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120747-1	1314V3-01-B43 (0-2)	Solid	11/29/16 08:45	11/30/16 10:20
500-120747-2	1314V3-01-B42 (0-2)	Solid	11/29/16 08:55	11/30/16 10:20
500-120747-3	1314V3-01-B41 (0-2)	Solid	11/29/16 09:05	11/30/16 10:20
500-120747-4	1314V3-01-B40 (0-2)	Solid	11/29/16 09:15	11/30/16 10:20
500-120747-5	1314V3-01-B37 (0-2)	Solid	11/29/16 09:45	11/30/16 10:20
500-120747-6	1314V3-01-B19 (0-5)	Solid	11/29/16 13:25	11/30/16 10:20
500-120747-7	1314V3-01-B18 (0-7)	Solid	11/29/16 13:45	11/30/16 10:20
500-120747-8	1314V3-01-B17 (0-7)	Solid	11/29/16 14:05	11/30/16 10:20
500-120747-9	1314V3-01-B16 (0-6)	Solid	11/29/16 14:20	11/30/16 10:20
500-120747-10	1314V3-01-B15 (0-7)	Solid	11/29/16 15:00	11/30/16 10:20
500-120747-11	1314V3-01-B15 (7-13)	Solid	11/29/16 15:05	11/30/16 10:20
500-120747-12	1314V3-01-B14 (0-6)	Solid	11/29/16 15:25	11/30/16 10:20
500-120747-13	1314V3-01-B14 (6-12)	Solid	11/29/16 15:30	11/30/16 10:20
500-120747-14	1314V3-01-B12 (0-6)	Solid	11/29/16 16:10	11/30/16 10:20
500-120747-15	1314V3-01-B12 (6-11)	Solid	11/29/16 16:15	11/30/16 10:20
500-120747-16	1314V3-01-B13 (0-5)	Solid	11/29/16 16:30	11/30/16 10:20
500-120747-17	1314V3-01-B22 (0-7)	Solid	11/29/16 16:55	11/30/16 10:20

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-1**

**Date Collected: 11/29/16 08:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 83.2**

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

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

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

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

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

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# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-1**

**Date Collected: 11/29/16 08:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 83.2**

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

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

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# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-1**

Date Collected: 11/29/16 08:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 83.2

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-1**

**Date Collected: 11/29/16 08:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 83.2**

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

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

**Method: 6010B - SPLP Metals - SPLP East**

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Lab Sample ID: 500-120747-2**

**Date Collected: 11/29/16 08:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**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	0.0078	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 11:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	11/30/16 13:20	12/06/16 11:24	1
Dibromofluoromethane	106		75 - 120	11/30/16 13:20	12/06/16 11:24	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	11/30/16 13:20	12/06/16 11:24	1
Toluene-d8 (Surr)	106		75 - 123	11/30/16 13:20	12/06/16 11:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Lab Sample ID: 500-120747-2**

**Date Collected: 11/29/16 08:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**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	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Phenanthrene</b>	<b>0.046</b>		0.040	0.0057	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Anthracene</b>	<b>0.012 J</b>		0.040	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Fluoranthene</b>	<b>0.12</b>		0.040	0.0075	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Pyrene</b>	<b>0.11</b>		0.040	0.0081	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Benzo[a]anthracene</b>	<b>0.061</b>		0.040	0.0055	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Lab Sample ID: 500-120747-2**

Date Collected: 11/29/16 08:55

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.072</b>		0.040	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Benzo[b]fluoranthene</b>	<b>0.091</b>		0.040	0.0088	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Benzo[k]fluoranthene</b>	<b>0.031</b>	J	0.040	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Benzo[a]pyrene</b>	<b>0.067</b>		0.040	0.0079	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.036</b>	J	0.040	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
<b>Benzo[g,h,i]perylene</b>	<b>0.043</b>		0.040	0.013	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/07/16 07:41	12/07/16 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	89		40 - 130	12/07/16 07:41	12/07/16 19:04	1
Phenol-d5	78		36 - 123	12/07/16 07:41	12/07/16 19:04	1
Nitrobenzene-d5	81		33 - 124	12/07/16 07:41	12/07/16 19:04	1
2-Fluorobiphenyl	75		42 - 115	12/07/16 07:41	12/07/16 19:04	1
2,4,6-Tribromophenol	63		25 - 130	12/07/16 07:41	12/07/16 19:04	1
Terphenyl-d14	83		25 - 150	12/07/16 07:41	12/07/16 19:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.41</b>	J	1.2	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Arsenic</b>	<b>6.5</b>		0.59	0.27	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Barium</b>	<b>100</b>		0.59	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Beryllium</b>	<b>0.56</b>		0.24	0.051	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Boron</b>	<b>3.5</b>		3.0	0.42	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Cadmium</b>	<b>0.38</b>		0.12	0.034	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Calcium</b>	<b>13000</b>		12	3.8	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Chromium</b>	<b>15</b>	B	0.59	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Cobalt</b>	<b>8.1</b>		0.30	0.067	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Copper</b>	<b>20</b>		0.59	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Iron</b>	<b>18000</b>		12	4.6	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Lead</b>	<b>130</b>		0.30	0.15	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Magnesium</b>	<b>5200</b>		5.9	2.4	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Manganese</b>	<b>460</b>		0.59	0.12	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Nickel</b>	<b>21</b>		0.59	0.16	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Potassium</b>	<b>770</b>		30	4.8	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Selenium</b>	<b>0.94</b>		0.59	0.29	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
Silver	<0.30		0.30	0.069	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Sodium</b>	<b>430</b>		59	7.8	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Vanadium</b>	<b>22</b>		0.30	0.087	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1
<b>Zinc</b>	<b>110</b>		1.2	0.38	mg/Kg	☼	11/30/16 15:02	12/01/16 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>1.1</b>		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 08:20	1
Boron	<0.50		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:20	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Lab Sample ID: 500-120747-2**

**Date Collected: 11/29/16 08:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**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		12/03/16 09:49	12/04/16 08:20	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:20	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:20	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 08:20	1
<b>Lead</b>	<b>0.0086</b>		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 08:20	1
<b>Manganese</b>	<b>0.079</b>		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:20	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:20	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 08:20	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:20	1
<b>Zinc</b>	<b>0.15</b>	<b>J B</b>	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 08:20	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.30</b>		0.0075	0.0075	mg/L		12/05/16 08:16	12/05/16 23:07	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		12/03/16 09:49	12/05/16 14:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:03	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		12/05/16 17:00	12/06/16 10:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.16</b>		0.020	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 10:25	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU			12/02/16 15:13	1

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-3**

**Date Collected: 11/29/16 09:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.6**

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

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

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

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

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

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# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-3**

**Date Collected: 11/29/16 09:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.6**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-3**

**Date Collected: 11/29/16 09:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.6**

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-3**

**Date Collected: 11/29/16 09:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.6**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-4**

**Date Collected: 11/29/16 09:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.4**

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-4**

**Date Collected: 11/29/16 09:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.4**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-4**

**Date Collected: 11/29/16 09:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.4**

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-4**

**Date Collected: 11/29/16 09:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.4**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B37 (0-2)**

**Lab Sample ID: 500-120747-5**

**Date Collected: 11/29/16 09:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Methylene Chloride	<0.0044		0.0044	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	11/30/16 13:20	12/06/16 12:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 120	11/30/16 13:20	12/06/16 12:41	1
Dibromofluoromethane	107		75 - 120	11/30/16 13:20	12/06/16 12:41	1
1,2-Dichloroethane-d4 (Surr)	98		69 - 134	11/30/16 13:20	12/06/16 12:41	1
Toluene-d8 (Surr)	103		75 - 123	11/30/16 13:20	12/06/16 12:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B37 (0-2)**

**Lab Sample ID: 500-120747-5**

**Date Collected: 11/29/16 09:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**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	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B37 (0-2)**

**Lab Sample ID: 500-120747-5**

**Date Collected: 11/29/16 09:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 20:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		40 - 130	12/07/16 07:41	12/07/16 20:29	1
Phenol-d5	84		36 - 123	12/07/16 07:41	12/07/16 20:29	1
Nitrobenzene-d5	80		33 - 124	12/07/16 07:41	12/07/16 20:29	1
2-Fluorobiphenyl	76		42 - 115	12/07/16 07:41	12/07/16 20:29	1
2,4,6-Tribromophenol	79		25 - 130	12/07/16 07:41	12/07/16 20:29	1
Terphenyl-d14	80		25 - 150	12/07/16 07:41	12/07/16 20:29	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	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Arsenic</b>	<b>3.8</b>		0.52	0.24	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Barium</b>	<b>40</b>		0.52	0.094	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Beryllium</b>	<b>0.48</b>		0.21	0.045	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Boron</b>	<b>2.4 J</b>		2.6	0.36	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Cadmium</b>	<b>0.20</b>		0.10	0.030	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Calcium</b>	<b>57000</b>		100	33	mg/Kg	☼	11/30/16 15:02	12/01/16 17:44	10
<b>Chromium</b>	<b>10 B</b>		0.52	0.089	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Cobalt</b>	<b>8.3</b>		0.26	0.058	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Copper</b>	<b>12</b>		0.52	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Iron</b>	<b>16000</b>		10	4.0	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Lead</b>	<b>9.1</b>		0.26	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Magnesium</b>	<b>18000</b>		5.2	2.1	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Manganese</b>	<b>350</b>		0.52	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Nickel</b>	<b>19</b>		0.52	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Potassium</b>	<b>700</b>		26	4.2	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Selenium</b>	<b>0.47 J</b>		0.52	0.26	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Sodium</b>	<b>740</b>		52	6.8	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
Thallium	<0.52		0.52	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Vanadium</b>	<b>15</b>		0.26	0.075	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1
<b>Zinc</b>	<b>43</b>		1.0	0.33	mg/Kg	☼	11/30/16 15:02	12/01/16 15:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.54</b>		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 08:40	1
<b>Boron</b>	<b>0.076 J</b>		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:40	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B37 (0-2)**

**Lab Sample ID: 500-120747-5**

**Date Collected: 11/29/16 09:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.7**

**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		12/03/16 09:49	12/04/16 08:40	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:40	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:40	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 08:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 08:40	1
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:40	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:40	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 08:40	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:40	1
<b>Zinc</b>	<b>0.044</b>	<b>J B</b>	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 08:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.88</b>		0.025	0.010	mg/L		12/05/16 08:16	12/05/16 23:28	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		12/03/16 09:49	12/05/16 14:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:13	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		12/05/16 17:00	12/06/16 10:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.039</b>		0.017	0.0090	mg/Kg	☼	12/02/16 14:45	12/05/16 10:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.2</b>		0.2	0.2	SU			12/02/16 15:34	1

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-6**

**Date Collected: 11/29/16 13:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-6**

**Date Collected: 11/29/16 13:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-6**

**Date Collected: 11/29/16 13:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/07/16 07:41	12/07/16 20:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	86		40 - 130				12/07/16 07:41	12/07/16 20:57	1
Phenol-d5	83		36 - 123				12/07/16 07:41	12/07/16 20:57	1
Nitrobenzene-d5	80		33 - 124				12/07/16 07:41	12/07/16 20:57	1
2-Fluorobiphenyl	75		42 - 115				12/07/16 07:41	12/07/16 20:57	1
2,4,6-Tribromophenol	75		25 - 130				12/07/16 07:41	12/07/16 20:57	1
Terphenyl-d14	83		25 - 150				12/07/16 07:41	12/07/16 20:57	1

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-6**

**Date Collected: 11/29/16 13:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-7**

**Date Collected: 11/29/16 13:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.9**

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

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

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

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

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

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-7**

**Date Collected: 11/29/16 13:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.9**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-7**

**Date Collected: 11/29/16 13:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.9**

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

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-7**

**Date Collected: 11/29/16 13:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.9**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-8**

**Date Collected: 11/29/16 14:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 86.8**

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-8**

**Date Collected: 11/29/16 14:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 86.8**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-8**

**Date Collected: 11/29/16 14:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 86.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 21:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/07/16 07:41	12/07/16 21:53	1
Phenol-d5	88		36 - 123	12/07/16 07:41	12/07/16 21:53	1
Nitrobenzene-d5	88		33 - 124	12/07/16 07:41	12/07/16 21:53	1
2-Fluorobiphenyl	82		42 - 115	12/07/16 07:41	12/07/16 21:53	1
2,4,6-Tribromophenol	87		25 - 130	12/07/16 07:41	12/07/16 21:53	1
Terphenyl-d14	88		25 - 150	12/07/16 07:41	12/07/16 21:53	1

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-8**

**Date Collected: 11/29/16 14:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 86.8**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-9**

**Date Collected: 11/29/16 14:20**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

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

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

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

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

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

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-9**

**Date Collected: 11/29/16 14:20**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-9**

**Date Collected: 11/29/16 14:20**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/07/16 22:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	87		40 - 130				12/07/16 07:41	12/07/16 22:21	1
Phenol-d5	83		36 - 123				12/07/16 07:41	12/07/16 22:21	1
Nitrobenzene-d5	84		33 - 124				12/07/16 07:41	12/07/16 22:21	1
2-Fluorobiphenyl	79		42 - 115				12/07/16 07:41	12/07/16 22:21	1
2,4,6-Tribromophenol	85		25 - 130				12/07/16 07:41	12/07/16 22:21	1
Terphenyl-d14	90		25 - 150				12/07/16 07:41	12/07/16 22:21	1

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-9**

**Date Collected: 11/29/16 14:20**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-10**

**Date Collected: 11/29/16 15:00**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.3**

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-10**

**Date Collected: 11/29/16 15:00**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.3**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-10**

**Date Collected: 11/29/16 15:00**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.3**

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

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-10**

**Date Collected: 11/29/16 15:00**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.3**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-11**

**Date Collected: 11/29/16 15:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

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

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

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

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

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-11**

**Date Collected: 11/29/16 15:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-11**

**Date Collected: 11/29/16 15:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-11**

**Date Collected: 11/29/16 15:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-12**

**Date Collected: 11/29/16 15:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.0**

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

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	11/30/16 13:20	12/06/16 15:37	1
Dibromofluoromethane	105		75 - 120	11/30/16 13:20	12/06/16 15:37	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/30/16 13:20	12/06/16 15:37	1
Toluene-d8 (Surr)	103		75 - 123	11/30/16 13:20	12/06/16 15:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/07/16 07:41	12/07/16 23:45	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-12**

**Date Collected: 11/29/16 15:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.0**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-12**

Date Collected: 11/29/16 15:25

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 85.0

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

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

## Method: 6010B - Metals (ICP)

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-12**

**Date Collected: 11/29/16 15:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.0**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-13**

**Date Collected: 11/29/16 15:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.0**

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

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

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

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

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

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-13**

**Date Collected: 11/29/16 15:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.0**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-13**

**Date Collected: 11/29/16 15:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.0**

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-13**

**Date Collected: 11/29/16 15:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.0**

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

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

**Method: 6010B - SPLP Metals - SPLP East**

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-14**

**Date Collected: 11/29/16 16:10**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-14**

**Date Collected: 11/29/16 16:10**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-14**

Date Collected: 11/29/16 16:10

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/07/16 07:41	12/08/16 00:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130				12/07/16 07:41	12/08/16 00:41	1
Phenol-d5	74		36 - 123				12/07/16 07:41	12/08/16 00:41	1
Nitrobenzene-d5	81		33 - 124				12/07/16 07:41	12/08/16 00:41	1
2-Fluorobiphenyl	76		42 - 115				12/07/16 07:41	12/08/16 00:41	1
2,4,6-Tribromophenol	80		25 - 130				12/07/16 07:41	12/08/16 00:41	1
Terphenyl-d14	83		25 - 150				12/07/16 07:41	12/08/16 00:41	1

## Method: 6010B - Metals (ICP)

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-14**

**Date Collected: 11/29/16 16:10**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-15**

Date Collected: 11/29/16 16:15

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 79.8

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

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

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

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

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

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-15**

**Date Collected: 11/29/16 16:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.8**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-15**

**Date Collected: 11/29/16 16:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.8**

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

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

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

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-15**

**Date Collected: 11/29/16 16:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.8**

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B13 (0-5)**

**Lab Sample ID: 500-120747-16**

**Date Collected: 11/29/16 16:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 93.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,1,1,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/30/16 13:20	12/06/16 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	11/30/16 13:20	12/06/16 17:19	1
Dibromofluoromethane	105		75 - 120	11/30/16 13:20	12/06/16 17:19	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	11/30/16 13:20	12/06/16 17:19	1
Toluene-d8 (Surr)	107		75 - 123	11/30/16 13:20	12/06/16 17:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.076	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B13 (0-5)**

**Lab Sample ID: 500-120747-16**

**Date Collected: 11/29/16 16:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 93.3**

**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	☼	12/07/16 07:41	12/08/16 01:37	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
N-Nitrosodi-n-propylamine	<0.069		0.069	0.042	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Naphthalene	<0.034		0.034	0.0052	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2-Nitrophenol	<0.34		0.34	0.081	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,4-Dinitrophenol	<0.69		0.69	0.60	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
4-Nitrophenol	<0.69		0.69	0.32	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Hexachlorobenzene	<0.069		0.069	0.0079	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.27	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Phenanthrene	<0.034		0.034	0.0048	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Anthracene	<0.034		0.034	0.0057	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
<b>Fluoranthene</b>	<b>0.0066</b>	<b>J</b>	0.034	0.0063	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
<b>Pyrene</b>	<b>0.0070</b>	<b>J</b>	0.034	0.0068	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Benzo[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B13 (0-5)**

**Lab Sample ID: 500-120747-16**

**Date Collected: 11/29/16 16:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 93.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.034		0.034	0.0093	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
<b>Benzo[b]fluoranthene</b>	<b>0.0075</b>	<b>J</b>	0.034	0.0074	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Benzo[a]pyrene	<0.034		0.034	0.0066	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0088	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0066	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	12/07/16 07:41	12/08/16 01:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>2-Fluorophenol</i>	93		40 - 130				12/07/16 07:41	12/08/16 01:37	1
<i>Phenol-d5</i>	77		36 - 123				12/07/16 07:41	12/08/16 01:37	1
<i>Nitrobenzene-d5</i>	85		33 - 124				12/07/16 07:41	12/08/16 01:37	1
<i>2-Fluorobiphenyl</i>	78		42 - 115				12/07/16 07:41	12/08/16 01:37	1
<i>2,4,6-Tribromophenol</i>	74		25 - 130				12/07/16 07:41	12/08/16 01:37	1
<i>Terphenyl-d14</i>	84		25 - 150				12/07/16 07:41	12/08/16 01:37	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	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Arsenic</b>	<b>2.1</b>		0.51	0.24	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Barium</b>	<b>30</b>		0.51	0.093	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Beryllium</b>	<b>0.25</b>		0.20	0.044	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Boron</b>	<b>1.5</b>	<b>J</b>	2.6	0.36	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Cadmium</b>	<b>0.061</b>	<b>J</b>	0.10	0.030	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Calcium</b>	<b>8000</b>		10	3.3	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Chromium</b>	<b>9.5</b>	<b>B</b>	0.51	0.088	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Cobalt</b>	<b>4.1</b>		0.26	0.058	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Copper</b>	<b>5.1</b>		0.51	0.11	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Iron</b>	<b>7400</b>		10	3.9	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Lead</b>	<b>6.4</b>		0.26	0.13	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Magnesium</b>	<b>4000</b>		5.1	2.1	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Manganese</b>	<b>180</b>		0.51	0.10	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Nickel</b>	<b>8.8</b>		0.51	0.14	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Potassium</b>	<b>350</b>		26	4.2	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Selenium</b>	<b>0.35</b>	<b>J</b>	0.51	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Sodium</b>	<b>250</b>		51	6.7	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Vanadium</b>	<b>9.1</b>		0.26	0.075	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1
<b>Zinc</b>	<b>22</b>		1.0	0.32	mg/Kg	☼	11/30/16 15:02	12/01/16 16:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.64</b>		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 10:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 10:24	1
<b>Boron</b>	<b>0.070</b>	<b>J</b>	0.50	0.050	mg/L		12/03/16 09:49	12/04/16 10:24	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B13 (0-5)**

**Lab Sample ID: 500-120747-16**

**Date Collected: 11/29/16 16:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 93.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 10:24	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:24	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:24	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 10:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 10:24	1
<b>Manganese</b>	<b>0.87</b>		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:24	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:24	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 10:24	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 10:24	1
<b>Zinc</b>	<b>0.025</b>	<b>J B</b>	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 10:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.76</b>		0.025	0.010	mg/L		12/05/16 08:16	12/06/16 00:51	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		12/03/16 09:49	12/05/16 14:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 14:58	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.028</b>		0.017	0.0088	mg/Kg	☼	12/02/16 14:45	12/05/16 11:06	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU			12/02/16 16:53	1

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-17**

**Date Collected: 11/29/16 16:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.6**

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

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

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

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

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

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-17**

**Date Collected: 11/29/16 16:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.6**

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-17**

**Date Collected: 11/29/16 16:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/07/16 07:41	12/08/16 02:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/07/16 07:41	12/08/16 02:05	1
Phenol-d5	82		36 - 123	12/07/16 07:41	12/08/16 02:05	1
Nitrobenzene-d5	92		33 - 124	12/07/16 07:41	12/08/16 02:05	1
2-Fluorobiphenyl	82		42 - 115	12/07/16 07:41	12/08/16 02:05	1
2,4,6-Tribromophenol	82		25 - 130	12/07/16 07:41	12/08/16 02:05	1
Terphenyl-d14	90		25 - 150	12/07/16 07:41	12/08/16 02:05	1

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

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

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

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

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-17**

**Date Collected: 11/29/16 16:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.6**

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

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

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

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

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

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

**Method: 7470A - TCLP Mercury - TCLP**

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

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

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

**General Chemistry**

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

# Definitions/Glossary

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

TestAmerica Job ID: 500-120747-1

## Qualifiers

### GC/MS Semi VOA

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

### Metals

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

## Glossary

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

# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## GC/MS VOA

### Prep Batch: 363125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	5035	
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	5035	
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	5035	
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	5035	
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	5035	
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	5035	
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	5035	
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	5035	
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	5035	
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	5035	
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	5035	
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	5035	
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	5035	
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	5035	
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	5035	
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	5035	
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	5035	

### Analysis Batch: 363734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	8260B	363125
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	8260B	363125
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	8260B	363125
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	8260B	363125
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	8260B	363125
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	8260B	363125
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	8260B	363125
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	8260B	363125
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	8260B	363125
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	8260B	363125
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	8260B	363125
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	8260B	363125
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	8260B	363125
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	8260B	363125
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	8260B	363125
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	8260B	363125
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	8260B	363125
MB 500-363734/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-363734/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363734/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 363922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	3541	
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	3541	
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	3541	
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	3541	
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	3541	

TestAmerica Chicago

# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 363922 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	3541	
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	3541	
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	3541	
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	3541	
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	3541	
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	3541	
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	3541	
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	3541	
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	3541	
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	3541	
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	3541	
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	3541	
MB 500-363922/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-363922/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-120747-1 MS	1314V3-01-B43 (0-2)	Total/NA	Solid	3541	
500-120747-1 MSD	1314V3-01-B43 (0-2)	Total/NA	Solid	3541	

### Analysis Batch: 364055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	8270D	363922
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	8270D	363922
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	8270D	363922
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	8270D	363922
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	8270D	363922
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	8270D	363922
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	8270D	363922
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	8270D	363922
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	8270D	363922
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	8270D	363922
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	8270D	363922
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	8270D	363922
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	8270D	363922
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	8270D	363922
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	8270D	363922
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	8270D	363922
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	8270D	363922
MB 500-363922/1-A	Method Blank	Total/NA	Solid	8270D	363922
LCS 500-363922/2-A	Lab Control Sample	Total/NA	Solid	8270D	363922
500-120747-1 MS	1314V3-01-B43 (0-2)	Total/NA	Solid	8270D	363922
500-120747-1 MSD	1314V3-01-B43 (0-2)	Total/NA	Solid	8270D	363922

## Metals

### Prep Batch: 363008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	3050B	
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	3050B	
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	3050B	
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	3050B	
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	3050B	

TestAmerica Chicago

# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## Metals (Continued)

### Prep Batch: 363008 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	3050B	
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	3050B	
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	3050B	
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	3050B	
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	3050B	
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	3050B	
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	3050B	
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	3050B	
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	3050B	
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	3050B	
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	3050B	
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	3050B	
MB 500-363008/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-363008/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-120747-17 MS	1314V3-01-B22 (0-7)	Total/NA	Solid	3050B	
500-120747-17 MSD	1314V3-01-B22 (0-7)	Total/NA	Solid	3050B	
500-120747-17 DU	1314V3-01-B22 (0-7)	Total/NA	Solid	3050B	

### Analysis Batch: 363271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	6010B	363008
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	6010B	363008
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	6010B	363008
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	6010B	363008
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	6010B	363008
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	6010B	363008
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	6010B	363008
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	6010B	363008
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	6010B	363008
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	6010B	363008
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	6010B	363008
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	6010B	363008
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	6010B	363008
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	6010B	363008
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	6010B	363008
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	6010B	363008
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	6010B	363008
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	6010B	363008
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	6010B	363008
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	6010B	363008
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	6010B	363008
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	6010B	363008
MB 500-363008/1-A	Method Blank	Total/NA	Solid	6010B	363008
LCS 500-363008/2-A	Lab Control Sample	Total/NA	Solid	6010B	363008
500-120747-17 MS	1314V3-01-B22 (0-7)	Total/NA	Solid	6010B	363008
500-120747-17 MSD	1314V3-01-B22 (0-7)	Total/NA	Solid	6010B	363008
500-120747-17 DU	1314V3-01-B22 (0-7)	Total/NA	Solid	6010B	363008

### Leach Batch: 363354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	SPLP East	Solid	1312	

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# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## Metals (Continued)

### Leach Batch: 363354 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-2	1314V3-01-B42 (0-2)	SPLP East	Solid	1312	
500-120747-3	1314V3-01-B41 (0-2)	SPLP East	Solid	1312	
500-120747-4	1314V3-01-B40 (0-2)	SPLP East	Solid	1312	
500-120747-5	1314V3-01-B37 (0-2)	SPLP East	Solid	1312	
500-120747-6	1314V3-01-B19 (0-5)	SPLP East	Solid	1312	
500-120747-7	1314V3-01-B18 (0-7)	SPLP East	Solid	1312	
500-120747-8	1314V3-01-B17 (0-7)	SPLP East	Solid	1312	
500-120747-9	1314V3-01-B16 (0-6)	SPLP East	Solid	1312	
500-120747-10	1314V3-01-B15 (0-7)	SPLP East	Solid	1312	
500-120747-11	1314V3-01-B15 (7-13)	SPLP East	Solid	1312	
500-120747-12	1314V3-01-B14 (0-6)	SPLP East	Solid	1312	
500-120747-13	1314V3-01-B14 (6-12)	SPLP East	Solid	1312	
500-120747-14	1314V3-01-B12 (0-6)	SPLP East	Solid	1312	
500-120747-16	1314V3-01-B13 (0-5)	SPLP East	Solid	1312	
500-120747-17	1314V3-01-B22 (0-7)	SPLP East	Solid	1312	
LB 500-363354/1-B	Method Blank	SPLP East	Solid	1312	
LB 500-363354/1-D	Method Blank	SPLP East	Solid	1312	
500-120747-17 MS	1314V3-01-B22 (0-7)	SPLP East	Solid	1312	
500-120747-17 DU	1314V3-01-B22 (0-7)	SPLP East	Solid	1312	

### Leach Batch: 363365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	TCLP	Solid	1311	
500-120747-2	1314V3-01-B42 (0-2)	TCLP	Solid	1311	
500-120747-3	1314V3-01-B41 (0-2)	TCLP	Solid	1311	
500-120747-4	1314V3-01-B40 (0-2)	TCLP	Solid	1311	
500-120747-5	1314V3-01-B37 (0-2)	TCLP	Solid	1311	
500-120747-6	1314V3-01-B19 (0-5)	TCLP	Solid	1311	
500-120747-7	1314V3-01-B18 (0-7)	TCLP	Solid	1311	
500-120747-8	1314V3-01-B17 (0-7)	TCLP	Solid	1311	
500-120747-9	1314V3-01-B16 (0-6)	TCLP	Solid	1311	
500-120747-10	1314V3-01-B15 (0-7)	TCLP	Solid	1311	
500-120747-11	1314V3-01-B15 (7-13)	TCLP	Solid	1311	
500-120747-12	1314V3-01-B14 (0-6)	TCLP	Solid	1311	
500-120747-13	1314V3-01-B14 (6-12)	TCLP	Solid	1311	
500-120747-14	1314V3-01-B12 (0-6)	TCLP	Solid	1311	
500-120747-15	1314V3-01-B12 (6-11)	TCLP	Solid	1311	
500-120747-16	1314V3-01-B13 (0-5)	TCLP	Solid	1311	
500-120747-17	1314V3-01-B22 (0-7)	TCLP	Solid	1311	
LB 500-363365/1-B	Method Blank	TCLP	Solid	1311	
LB 500-363365/1-C	Method Blank	TCLP	Solid	1311	
500-120747-1 MS	1314V3-01-B43 (0-2)	TCLP	Solid	1311	
500-120747-1 DU	1314V3-01-B43 (0-2)	TCLP	Solid	1311	

### Prep Batch: 363378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	7471B	
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	7471B	
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	7471B	
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	7471B	

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# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## Metals (Continued)

### Prep Batch: 363378 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	7471B	
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	7471B	
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	7471B	
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	7471B	
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	7471B	
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	7471B	
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	7471B	
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	7471B	
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	7471B	
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	7471B	
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	7471B	
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	7471B	
MB 500-363378/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-363378/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-120747-1 MS	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	
500-120747-1 MSD	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	
500-120747-1 DU	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	

### Prep Batch: 363469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	TCLP	Solid	3010A	363365
500-120747-2	1314V3-01-B42 (0-2)	TCLP	Solid	3010A	363365
500-120747-3	1314V3-01-B41 (0-2)	TCLP	Solid	3010A	363365
500-120747-4	1314V3-01-B40 (0-2)	TCLP	Solid	3010A	363365
500-120747-5	1314V3-01-B37 (0-2)	TCLP	Solid	3010A	363365
500-120747-6	1314V3-01-B19 (0-5)	TCLP	Solid	3010A	363365
500-120747-7	1314V3-01-B18 (0-7)	TCLP	Solid	3010A	363365
500-120747-8	1314V3-01-B17 (0-7)	TCLP	Solid	3010A	363365
500-120747-9	1314V3-01-B16 (0-6)	TCLP	Solid	3010A	363365
500-120747-10	1314V3-01-B15 (0-7)	TCLP	Solid	3010A	363365
500-120747-11	1314V3-01-B15 (7-13)	TCLP	Solid	3010A	363365
500-120747-12	1314V3-01-B14 (0-6)	TCLP	Solid	3010A	363365
500-120747-13	1314V3-01-B14 (6-12)	TCLP	Solid	3010A	363365
500-120747-14	1314V3-01-B12 (0-6)	TCLP	Solid	3010A	363365
500-120747-15	1314V3-01-B12 (6-11)	TCLP	Solid	3010A	363365
500-120747-16	1314V3-01-B13 (0-5)	TCLP	Solid	3010A	363365
500-120747-17	1314V3-01-B22 (0-7)	TCLP	Solid	3010A	363365
LB 500-363365/1-B	Method Blank	TCLP	Solid	3010A	363365
LCS 500-363469/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Analysis Batch: 363545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	TCLP	Solid	6010B	363469
500-120747-2	1314V3-01-B42 (0-2)	TCLP	Solid	6010B	363469
500-120747-3	1314V3-01-B41 (0-2)	TCLP	Solid	6010B	363469
500-120747-4	1314V3-01-B40 (0-2)	TCLP	Solid	6010B	363469
500-120747-5	1314V3-01-B37 (0-2)	TCLP	Solid	6010B	363469
500-120747-6	1314V3-01-B19 (0-5)	TCLP	Solid	6010B	363469
500-120747-7	1314V3-01-B18 (0-7)	TCLP	Solid	6010B	363469
500-120747-8	1314V3-01-B17 (0-7)	TCLP	Solid	6010B	363469
500-120747-9	1314V3-01-B16 (0-6)	TCLP	Solid	6010B	363469

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# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## Metals (Continued)

### Analysis Batch: 363545 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-10	1314V3-01-B15 (0-7)	TCLP	Solid	6010B	363469
500-120747-11	1314V3-01-B15 (7-13)	TCLP	Solid	6010B	363469
500-120747-12	1314V3-01-B14 (0-6)	TCLP	Solid	6010B	363469
500-120747-13	1314V3-01-B14 (6-12)	TCLP	Solid	6010B	363469
500-120747-14	1314V3-01-B12 (0-6)	TCLP	Solid	6010B	363469
500-120747-15	1314V3-01-B12 (6-11)	TCLP	Solid	6010B	363469
500-120747-16	1314V3-01-B13 (0-5)	TCLP	Solid	6010B	363469
500-120747-17	1314V3-01-B22 (0-7)	TCLP	Solid	6010B	363469
LB 500-363365/1-B	Method Blank	TCLP	Solid	6010B	363469
LCS 500-363469/2-A	Lab Control Sample	Total/NA	Solid	6010B	363469

### Prep Batch: 363557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	SPLP East	Solid	3010A	363354
500-120747-2	1314V3-01-B42 (0-2)	SPLP East	Solid	3010A	363354
500-120747-3	1314V3-01-B41 (0-2)	SPLP East	Solid	3010A	363354
500-120747-4	1314V3-01-B40 (0-2)	SPLP East	Solid	3010A	363354
500-120747-5	1314V3-01-B37 (0-2)	SPLP East	Solid	3010A	363354
500-120747-6	1314V3-01-B19 (0-5)	SPLP East	Solid	3010A	363354
500-120747-7	1314V3-01-B18 (0-7)	SPLP East	Solid	3010A	363354
500-120747-8	1314V3-01-B17 (0-7)	SPLP East	Solid	3010A	363354
500-120747-9	1314V3-01-B16 (0-6)	SPLP East	Solid	3010A	363354
500-120747-10	1314V3-01-B15 (0-7)	SPLP East	Solid	3010A	363354
500-120747-11	1314V3-01-B15 (7-13)	SPLP East	Solid	3010A	363354
500-120747-12	1314V3-01-B14 (0-6)	SPLP East	Solid	3010A	363354
500-120747-13	1314V3-01-B14 (6-12)	SPLP East	Solid	3010A	363354
500-120747-14	1314V3-01-B12 (0-6)	SPLP East	Solid	3010A	363354
500-120747-16	1314V3-01-B13 (0-5)	SPLP East	Solid	3010A	363354
500-120747-17	1314V3-01-B22 (0-7)	SPLP East	Solid	3010A	363354
LB 500-363354/1-B	Method Blank	SPLP East	Solid	3010A	363354
LCS 500-363557/2-A	Lab Control Sample	Total/NA	Solid	3010A	363354
500-120747-17 MS	1314V3-01-B22 (0-7)	SPLP East	Solid	3010A	363354
500-120747-17 DU	1314V3-01-B22 (0-7)	SPLP East	Solid	3010A	363354

### Analysis Batch: 363653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	363378
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	7471B	363378
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	7471B	363378
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	7471B	363378
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	7471B	363378
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	7471B	363378
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	7471B	363378
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	7471B	363378
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	7471B	363378
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	7471B	363378
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	7471B	363378
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	7471B	363378
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	7471B	363378
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	7471B	363378
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	7471B	363378

TestAmerica Chicago

# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## Metals (Continued)

### Analysis Batch: 363653 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	7471B	363378
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	7471B	363378
MB 500-363378/12-A	Method Blank	Total/NA	Solid	7471B	363378
LCS 500-363378/13-A	Lab Control Sample	Total/NA	Solid	7471B	363378
500-120747-1 MS	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	363378
500-120747-1 MSD	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	363378
500-120747-1 DU	1314V3-01-B43 (0-2)	Total/NA	Solid	7471B	363378

### Analysis Batch: 363685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	TCLP	Solid	6020A	363469
500-120747-2	1314V3-01-B42 (0-2)	TCLP	Solid	6020A	363469
500-120747-3	1314V3-01-B41 (0-2)	TCLP	Solid	6020A	363469
500-120747-4	1314V3-01-B40 (0-2)	TCLP	Solid	6020A	363469
500-120747-5	1314V3-01-B37 (0-2)	TCLP	Solid	6020A	363469
500-120747-6	1314V3-01-B19 (0-5)	TCLP	Solid	6020A	363469
500-120747-7	1314V3-01-B18 (0-7)	TCLP	Solid	6020A	363469
500-120747-8	1314V3-01-B17 (0-7)	TCLP	Solid	6020A	363469
500-120747-9	1314V3-01-B16 (0-6)	TCLP	Solid	6020A	363469
500-120747-10	1314V3-01-B15 (0-7)	TCLP	Solid	6020A	363469
500-120747-11	1314V3-01-B15 (7-13)	TCLP	Solid	6020A	363469
500-120747-12	1314V3-01-B14 (0-6)	TCLP	Solid	6020A	363469
500-120747-13	1314V3-01-B14 (6-12)	TCLP	Solid	6020A	363469
500-120747-14	1314V3-01-B12 (0-6)	TCLP	Solid	6020A	363469
500-120747-15	1314V3-01-B12 (6-11)	TCLP	Solid	6020A	363469
500-120747-16	1314V3-01-B13 (0-5)	TCLP	Solid	6020A	363469
500-120747-17	1314V3-01-B22 (0-7)	TCLP	Solid	6020A	363469
LB 500-363365/1-B	Method Blank	TCLP	Solid	6020A	363469
LCS 500-363469/2-A	Lab Control Sample	Total/NA	Solid	6020A	363469

### Prep Batch: 363702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	TCLP	Solid	7470A	363365
500-120747-2	1314V3-01-B42 (0-2)	TCLP	Solid	7470A	363365
500-120747-3	1314V3-01-B41 (0-2)	TCLP	Solid	7470A	363365
500-120747-4	1314V3-01-B40 (0-2)	TCLP	Solid	7470A	363365
500-120747-5	1314V3-01-B37 (0-2)	TCLP	Solid	7470A	363365
500-120747-6	1314V3-01-B19 (0-5)	TCLP	Solid	7470A	363365
500-120747-7	1314V3-01-B18 (0-7)	TCLP	Solid	7470A	363365
500-120747-8	1314V3-01-B17 (0-7)	TCLP	Solid	7470A	363365
500-120747-9	1314V3-01-B16 (0-6)	TCLP	Solid	7470A	363365
500-120747-10	1314V3-01-B15 (0-7)	TCLP	Solid	7470A	363365
500-120747-11	1314V3-01-B15 (7-13)	TCLP	Solid	7470A	363365
500-120747-12	1314V3-01-B14 (0-6)	TCLP	Solid	7470A	363365
500-120747-13	1314V3-01-B14 (6-12)	TCLP	Solid	7470A	363365
500-120747-14	1314V3-01-B12 (0-6)	TCLP	Solid	7470A	363365
500-120747-15	1314V3-01-B12 (6-11)	TCLP	Solid	7470A	363365
500-120747-16	1314V3-01-B13 (0-5)	TCLP	Solid	7470A	363365
500-120747-17	1314V3-01-B22 (0-7)	TCLP	Solid	7470A	363365
LB 500-363365/1-C	Method Blank	TCLP	Solid	7470A	363365
MB 500-363702/12-A	Method Blank	Total/NA	Solid	7470A	363365

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# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## Metals (Continued)

### Prep Batch: 363702 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-363702/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-120747-1 MS	1314V3-01-B43 (0-2)	TCLP	Solid	7470A	363365
500-120747-1 DU	1314V3-01-B43 (0-2)	TCLP	Solid	7470A	363365

### Analysis Batch: 363732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	SPLP East	Solid	6010B	363557
500-120747-2	1314V3-01-B42 (0-2)	SPLP East	Solid	6010B	363557
500-120747-3	1314V3-01-B41 (0-2)	SPLP East	Solid	6010B	363557
500-120747-4	1314V3-01-B40 (0-2)	SPLP East	Solid	6010B	363557
500-120747-5	1314V3-01-B37 (0-2)	SPLP East	Solid	6010B	363557
500-120747-6	1314V3-01-B19 (0-5)	SPLP East	Solid	6010B	363557
500-120747-7	1314V3-01-B18 (0-7)	SPLP East	Solid	6010B	363557
500-120747-8	1314V3-01-B17 (0-7)	SPLP East	Solid	6010B	363557
500-120747-9	1314V3-01-B16 (0-6)	SPLP East	Solid	6010B	363557
500-120747-10	1314V3-01-B15 (0-7)	SPLP East	Solid	6010B	363557
500-120747-11	1314V3-01-B15 (7-13)	SPLP East	Solid	6010B	363557
500-120747-12	1314V3-01-B14 (0-6)	SPLP East	Solid	6010B	363557
500-120747-13	1314V3-01-B14 (6-12)	SPLP East	Solid	6010B	363557
500-120747-14	1314V3-01-B12 (0-6)	SPLP East	Solid	6010B	363557
500-120747-16	1314V3-01-B13 (0-5)	SPLP East	Solid	6010B	363557
500-120747-17	1314V3-01-B22 (0-7)	SPLP East	Solid	6010B	363557
LB 500-363354/1-B	Method Blank	SPLP East	Solid	6010B	363557
LCS 500-363557/2-A	Lab Control Sample	Total/NA	Solid	6010B	363557
500-120747-17 MS	1314V3-01-B22 (0-7)	SPLP East	Solid	6010B	363557
500-120747-17 DU	1314V3-01-B22 (0-7)	SPLP East	Solid	6010B	363557

### Analysis Batch: 363785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	TCLP	Solid	7470A	363702
500-120747-2	1314V3-01-B42 (0-2)	TCLP	Solid	7470A	363702
500-120747-3	1314V3-01-B41 (0-2)	TCLP	Solid	7470A	363702
500-120747-4	1314V3-01-B40 (0-2)	TCLP	Solid	7470A	363702
500-120747-5	1314V3-01-B37 (0-2)	TCLP	Solid	7470A	363702
500-120747-6	1314V3-01-B19 (0-5)	TCLP	Solid	7470A	363702
500-120747-7	1314V3-01-B18 (0-7)	TCLP	Solid	7470A	363702
500-120747-8	1314V3-01-B17 (0-7)	TCLP	Solid	7470A	363702
500-120747-9	1314V3-01-B16 (0-6)	TCLP	Solid	7470A	363702
500-120747-10	1314V3-01-B15 (0-7)	TCLP	Solid	7470A	363702
500-120747-11	1314V3-01-B15 (7-13)	TCLP	Solid	7470A	363702
500-120747-12	1314V3-01-B14 (0-6)	TCLP	Solid	7470A	363702
500-120747-13	1314V3-01-B14 (6-12)	TCLP	Solid	7470A	363702
500-120747-14	1314V3-01-B12 (0-6)	TCLP	Solid	7470A	363702
500-120747-15	1314V3-01-B12 (6-11)	TCLP	Solid	7470A	363702
500-120747-16	1314V3-01-B13 (0-5)	TCLP	Solid	7470A	363702
500-120747-17	1314V3-01-B22 (0-7)	TCLP	Solid	7470A	363702
LB 500-363365/1-C	Method Blank	TCLP	Solid	7470A	363702
MB 500-363702/12-A	Method Blank	Total/NA	Solid	7470A	363702
LCS 500-363702/13-A	Lab Control Sample	Total/NA	Solid	7470A	363702
500-120747-1 MS	1314V3-01-B43 (0-2)	TCLP	Solid	7470A	363702
500-120747-1 DU	1314V3-01-B43 (0-2)	TCLP	Solid	7470A	363702

TestAmerica Chicago

# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## Prep Batch: 364159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-13	1314V3-01-B14 (6-12)	SPLP East	Solid	3010A	363354
LB 500-363354/1-D	Method Blank	SPLP East	Solid	3010A	363354
LCS 500-364159/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 500-364159/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

## Analysis Batch: 364327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-13	1314V3-01-B14 (6-12)	SPLP East	Solid	6010B	364159
LB 500-363354/1-D	Method Blank	SPLP East	Solid	6010B	364159
LCS 500-364159/2-A	Lab Control Sample	Total/NA	Solid	6010B	364159
LCSD 500-364159/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	364159

## General Chemistry

### Analysis Batch: 363014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	Moisture	
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	Moisture	
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	Moisture	
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	Moisture	
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	Moisture	
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	Moisture	
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	Moisture	
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	Moisture	
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	Moisture	
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	Moisture	
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	Moisture	
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	Moisture	
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	Moisture	
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	Moisture	
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	Moisture	
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	Moisture	
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	Moisture	
500-120747-1 DU	1314V3-01-B43 (0-2)	Total/NA	Solid	Moisture	

### Analysis Batch: 363480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-1	1314V3-01-B43 (0-2)	Total/NA	Solid	9045D	
500-120747-2	1314V3-01-B42 (0-2)	Total/NA	Solid	9045D	
500-120747-3	1314V3-01-B41 (0-2)	Total/NA	Solid	9045D	
500-120747-4	1314V3-01-B40 (0-2)	Total/NA	Solid	9045D	
500-120747-5	1314V3-01-B37 (0-2)	Total/NA	Solid	9045D	
500-120747-6	1314V3-01-B19 (0-5)	Total/NA	Solid	9045D	
500-120747-7	1314V3-01-B18 (0-7)	Total/NA	Solid	9045D	
500-120747-8	1314V3-01-B17 (0-7)	Total/NA	Solid	9045D	
500-120747-9	1314V3-01-B16 (0-6)	Total/NA	Solid	9045D	
500-120747-10	1314V3-01-B15 (0-7)	Total/NA	Solid	9045D	
500-120747-11	1314V3-01-B15 (7-13)	Total/NA	Solid	9045D	
500-120747-12	1314V3-01-B14 (0-6)	Total/NA	Solid	9045D	
500-120747-13	1314V3-01-B14 (6-12)	Total/NA	Solid	9045D	
500-120747-14	1314V3-01-B12 (0-6)	Total/NA	Solid	9045D	
500-120747-15	1314V3-01-B12 (6-11)	Total/NA	Solid	9045D	
500-120747-16	1314V3-01-B13 (0-5)	Total/NA	Solid	9045D	

TestAmerica Chicago

# QC Association Summary

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

TestAmerica Job ID: 500-120747-1

## General Chemistry (Continued)

### Analysis Batch: 363480 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120747-17	1314V3-01-B22 (0-7)	Total/NA	Solid	9045D	

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

# Surrogate Summary

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

TestAmerica Job ID: 500-120747-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	12DCE	TOL
		(70-120)	(75-120)	(69-134)	(75-123)
500-120747-1	1314V3-01-B43 (0-2)	95	104	98	105
500-120747-2	1314V3-01-B42 (0-2)	97	106	100	106
500-120747-3	1314V3-01-B41 (0-2)	97	105	99	106
500-120747-4	1314V3-01-B40 (0-2)	97	106	97	105
500-120747-5	1314V3-01-B37 (0-2)	95	107	98	103
500-120747-6	1314V3-01-B19 (0-5)	98	103	95	104
500-120747-7	1314V3-01-B18 (0-7)	96	109	98	106
500-120747-8	1314V3-01-B17 (0-7)	97	106	99	106
500-120747-9	1314V3-01-B16 (0-6)	94	106	100	105
500-120747-10	1314V3-01-B15 (0-7)	96	106	100	107
500-120747-11	1314V3-01-B15 (7-13)	97	107	100	105
500-120747-12	1314V3-01-B14 (0-6)	98	105	99	103
500-120747-13	1314V3-01-B14 (6-12)	95	104	98	104
500-120747-14	1314V3-01-B12 (0-6)	97	105	99	104
500-120747-15	1314V3-01-B12 (6-11)	97	109	100	103
500-120747-16	1314V3-01-B13 (0-5)	98	105	105	107
500-120747-17	1314V3-01-B22 (0-7)	98	108	101	105
LCS 500-363734/5	Lab Control Sample	101	103	96	111
LCSD 500-363734/6	Lab Control Sample Dup	105	105	99	109
MB 500-363734/7	Method Blank	102	106	101	106

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPH
		(40-130)	(36-123)	(33-124)	(42-115)	(25-130)	(25-150)
500-120747-1	1314V3-01-B43 (0-2)	92	78	83	81	64	98
500-120747-1 MS	1314V3-01-B43 (0-2)	85	85	83	83	77	98
500-120747-1 MSD	1314V3-01-B43 (0-2)	85	84	80	81	78	121
500-120747-2	1314V3-01-B42 (0-2)	89	78	81	75	63	83
500-120747-3	1314V3-01-B41 (0-2)	94	85	85	80	87	86
500-120747-4	1314V3-01-B40 (0-2)	89	84	88	81	83	89
500-120747-5	1314V3-01-B37 (0-2)	90	84	80	76	79	80
500-120747-6	1314V3-01-B19 (0-5)	86	83	80	75	75	83
500-120747-7	1314V3-01-B18 (0-7)	85	82	82	77	85	86
500-120747-8	1314V3-01-B17 (0-7)	98	88	88	82	87	88
500-120747-9	1314V3-01-B16 (0-6)	87	83	84	79	85	90
500-120747-10	1314V3-01-B15 (0-7)	83	79	80	75	76	82
500-120747-11	1314V3-01-B15 (7-13)	80	75	76	71	79	80
500-120747-12	1314V3-01-B14 (0-6)	85	73	78	72	78	82
500-120747-13	1314V3-01-B14 (6-12)	76	70	76	70	80	80
500-120747-14	1314V3-01-B12 (0-6)	88	74	81	76	80	83

TestAmerica Chicago

# Surrogate Summary

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

TestAmerica Job ID: 500-120747-1

## 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)
500-120747-15	1314V3-01-B12 (6-11)	87	76	85	77	83	85
500-120747-16	1314V3-01-B13 (0-5)	93	77	85	78	74	84
500-120747-17	1314V3-01-B22 (0-7)	98	82	92	82	82	90
LCS 500-363922/2-A	Lab Control Sample	104	92	94	93	110	98
MB 500-363922/1-A	Method Blank	102	92	91	87	99	96

### 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: 500-120747-1

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

**Lab Sample ID: MB 500-363734/7**

**Matrix: Solid**

**Analysis Batch: 363734**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/16 10:09	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 10:09	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/16 10:09	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 10:09	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/16 10:09	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/16 10:09	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/16 10:09	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 10:09	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/16 10:09	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 10:09	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 10:09	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 10:09	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/16 10:09	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 10:09	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/16 10:09	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 10:09	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 10:09	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 10:09	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/16 10:09	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 10:09	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/16 10:09	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 10:09	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 10:09	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 10:09	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/16 10:09	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 10:09	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/16 10:09	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 10:09	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 10:09	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 10:09	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 10:09	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/16 10:09	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/16 10:09	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 10:09	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/16 10:09	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 10:09	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/16 10:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120		12/06/16 10:09	1
Dibromofluoromethane	106		75 - 120		12/06/16 10:09	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134		12/06/16 10:09	1
Toluene-d8 (Surr)	106		75 - 123		12/06/16 10:09	1

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: LCS 500-363734/5**

**Matrix: Solid**

**Analysis Batch: 363734**

**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	0.0480		mg/Kg		96	40 - 148
Benzene	0.0500	0.0498		mg/Kg		100	70 - 120
Bromodichloromethane	0.0500	0.0474		mg/Kg		95	67 - 120
Bromoform	0.0500	0.0478		mg/Kg		96	50 - 129
Bromomethane	0.0500	0.0452		mg/Kg		90	50 - 134
2-Butanone (MEK)	0.0500	0.0538		mg/Kg		108	47 - 138
Carbon disulfide	0.0500	0.0482		mg/Kg		96	67 - 133
Carbon tetrachloride	0.0500	0.0465		mg/Kg		93	65 - 123
Chlorobenzene	0.0500	0.0496		mg/Kg		99	70 - 120
Chloroethane	0.0500	0.0425		mg/Kg		85	40 - 150
Chloroform	0.0500	0.0485		mg/Kg		97	70 - 120
Chloromethane	0.0500	0.0576		mg/Kg		115	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0495		mg/Kg		99	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0505		mg/Kg		101	70 - 120
Dibromochloromethane	0.0500	0.0489		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0505		mg/Kg		101	70 - 125
1,2-Dichloroethane	0.0500	0.0484		mg/Kg		97	65 - 126
1,1-Dichloroethene	0.0500	0.0487		mg/Kg		97	70 - 122
1,2-Dichloropropane	0.0500	0.0524		mg/Kg		105	70 - 126
Ethylbenzene	0.0500	0.0486		mg/Kg		97	70 - 120
2-Hexanone	0.0500	0.0530		mg/Kg		106	51 - 139
Methylene Chloride	0.0500	0.0488		mg/Kg		98	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0522		mg/Kg		104	51 - 141
Methyl tert-butyl ether	0.0500	0.0482		mg/Kg		96	70 - 121
Styrene	0.0500	0.0520		mg/Kg		104	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0487		mg/Kg		97	70 - 125
Tetrachloroethene	0.0500	0.0483		mg/Kg		97	70 - 122
Toluene	0.0500	0.0491		mg/Kg		98	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0484		mg/Kg		97	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0489		mg/Kg		98	70 - 121
1,1,1-Trichloroethane	0.0500	0.0474		mg/Kg		95	70 - 120
1,1,2-Trichloroethane	0.0500	0.0496		mg/Kg		99	70 - 120
Trichloroethene	0.0500	0.0480		mg/Kg		96	70 - 124
Vinyl acetate	0.0500	0.0439		mg/Kg		88	40 - 150
Vinyl chloride	0.0500	0.0526		mg/Kg		105	64 - 125
Xylenes, Total	0.100	0.100		mg/Kg		100	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane	103		75 - 120
1,2-Dichloroethane-d4 (Surr)	96		69 - 134
Toluene-d8 (Surr)	111		75 - 123

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

Lab Sample ID: LCSD 500-363734/6

Matrix: Solid

Analysis Batch: 363734

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	0.0512		mg/Kg		102	40 - 148	7	30
Benzene	0.0500	0.0488		mg/Kg		98	70 - 120	2	30
Bromodichloromethane	0.0500	0.0481		mg/Kg		96	67 - 120	1	30
Bromoform	0.0500	0.0497		mg/Kg		99	50 - 129	4	30
Bromomethane	0.0500	0.0440		mg/Kg		88	50 - 134	3	30
2-Butanone (MEK)	0.0500	0.0544		mg/Kg		109	47 - 138	1	30
Carbon disulfide	0.0500	0.0471		mg/Kg		94	67 - 133	2	30
Carbon tetrachloride	0.0500	0.0452		mg/Kg		90	65 - 123	3	30
Chlorobenzene	0.0500	0.0488		mg/Kg		98	70 - 120	2	30
Chloroethane	0.0500	0.0412		mg/Kg		82	40 - 150	3	30
Chloroform	0.0500	0.0492		mg/Kg		98	70 - 120	2	30
Chloromethane	0.0500	0.0564		mg/Kg		113	63 - 135	2	30
cis-1,2-Dichloroethene	0.0500	0.0489		mg/Kg		98	70 - 120	1	30
cis-1,3-Dichloropropene	0.0500	0.0506		mg/Kg		101	70 - 120	0	30
Dibromochloromethane	0.0500	0.0503		mg/Kg		101	68 - 120	3	30
1,1-Dichloroethane	0.0500	0.0498		mg/Kg		100	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0497		mg/Kg		99	65 - 126	3	30
1,1-Dichloroethene	0.0500	0.0475		mg/Kg		95	70 - 122	2	30
1,2-Dichloropropane	0.0500	0.0514		mg/Kg		103	70 - 126	2	30
Ethylbenzene	0.0500	0.0477		mg/Kg		95	70 - 120	2	30
2-Hexanone	0.0500	0.0594		mg/Kg		119	51 - 139	11	30
Methylene Chloride	0.0500	0.0491		mg/Kg		98	70 - 121	1	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0565		mg/Kg		113	51 - 141	8	30
Methyl tert-butyl ether	0.0500	0.0513		mg/Kg		103	70 - 121	6	30
Styrene	0.0500	0.0510		mg/Kg		102	70 - 121	2	30
1,1,1,2-Tetrachloroethane	0.0500	0.0508		mg/Kg		102	70 - 125	4	30
Tetrachloroethene	0.0500	0.0463		mg/Kg		93	70 - 122	4	30
Toluene	0.0500	0.0481		mg/Kg		96	70 - 121	2	30
trans-1,2-Dichloroethene	0.0500	0.0482		mg/Kg		96	70 - 120	1	30
trans-1,3-Dichloropropene	0.0500	0.0491		mg/Kg		98	70 - 121	0	30
1,1,1-Trichloroethane	0.0500	0.0470		mg/Kg		94	70 - 120	1	30
1,1,2-Trichloroethane	0.0500	0.0509		mg/Kg		102	70 - 120	3	30
Trichloroethene	0.0500	0.0479		mg/Kg		96	70 - 124	0	30
Vinyl acetate	0.0500	0.0440		mg/Kg		88	40 - 150	0	30
Vinyl chloride	0.0500	0.0516		mg/Kg		103	64 - 125	2	30
Xylenes, Total	0.100	0.0985		mg/Kg		98	70 - 123	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	105		70 - 120
Dibromofluoromethane	105		75 - 120
1,2-Dichloroethane-d4 (Surr)	99		69 - 134
Toluene-d8 (Surr)	109		75 - 123

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: MB 500-363922/1-A**

**Matrix: Solid**

**Analysis Batch: 364055**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 363922**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/07/16 07:41	12/07/16 18:08	1

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: MB 500-363922/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364055**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363922**

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		12/07/16 07:41	12/07/16 18:08	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/07/16 07:41	12/07/16 18:08	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/07/16 07:41	12/07/16 18:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/07/16 07:41	12/07/16 18:08	1
Phenol-d5	92		36 - 123	12/07/16 07:41	12/07/16 18:08	1
Nitrobenzene-d5	91		33 - 124	12/07/16 07:41	12/07/16 18:08	1
2-Fluorobiphenyl	87		42 - 115	12/07/16 07:41	12/07/16 18:08	1
2,4,6-Tribromophenol	99		25 - 130	12/07/16 07:41	12/07/16 18:08	1
Terphenyl-d14	96		25 - 150	12/07/16 07:41	12/07/16 18:08	1

**Lab Sample ID: LCS 500-363922/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364055**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363922**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.16		mg/Kg		87	55 - 118
Bis(2-chloroethyl)ether	1.33	1.12		mg/Kg		84	53 - 116
1,3-Dichlorobenzene	1.33	1.10		mg/Kg		83	56 - 110
1,4-Dichlorobenzene	1.33	1.09		mg/Kg		82	57 - 110
1,2-Dichlorobenzene	1.33	1.11		mg/Kg		83	56 - 110
2-Methylphenol	1.33	1.35		mg/Kg		101	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.18		mg/Kg		89	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.32		mg/Kg		99	56 - 119
Hexachloroethane	1.33	1.09		mg/Kg		82	54 - 111
2-Chlorophenol	1.33	1.18		mg/Kg		88	57 - 117
Nitrobenzene	1.33	1.23		mg/Kg		92	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.16		mg/Kg		87	59 - 116
1,2,4-Trichlorobenzene	1.33	1.13		mg/Kg		85	60 - 116
Isophorone	1.33	1.10		mg/Kg		82	54 - 120
2,4-Dimethylphenol	1.33	1.16		mg/Kg		87	50 - 120
Hexachlorobutadiene	1.33	1.12		mg/Kg		84	56 - 120
Naphthalene	1.33	1.14		mg/Kg		85	58 - 116
2,4-Dichlorophenol	1.33	1.17		mg/Kg		88	61 - 116

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: LCS 500-363922/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364055**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363922**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.44		mg/Kg		108	10 - 150
2,4,6-Trichlorophenol	1.33	1.19		mg/Kg		89	50 - 120
2,4,5-Trichlorophenol	1.33	1.31		mg/Kg		98	42 - 119
Hexachlorocyclopentadiene	1.33	1.16		mg/Kg		87	10 - 116
2-Methylnaphthalene	1.33	1.14		mg/Kg		86	55 - 120
2-Nitroaniline	1.33	1.25		mg/Kg		94	52 - 121
2-Chloronaphthalene	1.33	1.21		mg/Kg		90	57 - 112
4-Chloro-3-methylphenol	1.33	1.21		mg/Kg		91	59 - 117
2,6-Dinitrotoluene	1.33	1.35		mg/Kg		101	57 - 118
2-Nitrophenol	1.33	1.18		mg/Kg		88	58 - 121
3-Nitroaniline	1.33	1.26		mg/Kg		95	20 - 144
Dimethyl phthalate	1.33	1.25		mg/Kg		94	60 - 112
2,4-Dinitrophenol	2.67	1.33		mg/Kg		50	10 - 110
Acenaphthylene	1.33	1.19		mg/Kg		89	57 - 116
2,4-Dinitrotoluene	1.33	1.30		mg/Kg		97	59 - 119
Acenaphthene	1.33	1.20		mg/Kg		90	52 - 113
Dibenzofuran	1.33	1.23		mg/Kg		92	59 - 110
4-Nitrophenol	2.67	2.51		mg/Kg		94	32 - 123
Fluorene	1.33	1.22		mg/Kg		91	56 - 115
4-Nitroaniline	1.33	1.89		mg/Kg		142	55 - 146
4-Bromophenyl phenyl ether	1.33	1.21		mg/Kg		90	61 - 124
Hexachlorobenzene	1.33	1.16		mg/Kg		87	62 - 126
Diethyl phthalate	1.33	1.26		mg/Kg		94	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.23		mg/Kg		92	61 - 111
Pentachlorophenol	2.67	2.03		mg/Kg		76	12 - 116
N-Nitrosodiphenylamine	1.33	1.25		mg/Kg		93	62 - 117
4,6-Dinitro-2-methylphenol	2.67	1.71		mg/Kg		64	10 - 110
Phenanthrene	1.33	1.19		mg/Kg		89	58 - 125
Anthracene	1.33	1.18		mg/Kg		89	57 - 118
Carbazole	1.33	1.67		mg/Kg		125	65 - 137
Di-n-butyl phthalate	1.33	1.23		mg/Kg		92	61 - 123
Fluoranthene	1.33	1.22		mg/Kg		91	61 - 124
Pyrene	1.33	1.20		mg/Kg		90	60 - 115
Butyl benzyl phthalate	1.33	1.21		mg/Kg		91	61 - 115
Benzo[a]anthracene	1.33	1.22		mg/Kg		92	63 - 115
Chrysene	1.33	1.19		mg/Kg		90	63 - 118
3,3'-Dichlorobenzidine	1.33	1.10		mg/Kg		82	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.23		mg/Kg		92	62 - 117
Di-n-octyl phthalate	1.33	1.27		mg/Kg		95	58 - 129
Benzo[b]fluoranthene	1.33	1.19		mg/Kg		89	61 - 123
Benzo[k]fluoranthene	1.33	1.22		mg/Kg		92	59 - 125
Benzo[a]pyrene	1.33	1.21		mg/Kg		91	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.25		mg/Kg		94	50 - 149
Dibenz(a,h)anthracene	1.33	1.26		mg/Kg		95	61 - 134
Benzo[g,h,i]perylene	1.33	1.24		mg/Kg		93	55 - 134
3 & 4 Methylphenol	1.33	1.28		mg/Kg		96	55 - 124

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# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: LCS 500-363922/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364055**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363922**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	104		40 - 130
Phenol-d5	92		36 - 123
Nitrobenzene-d5	94		33 - 124
2-Fluorobiphenyl	93		42 - 115
2,4,6-Tribromophenol	110		25 - 130
Terphenyl-d14	98		25 - 150

**Lab Sample ID: 500-120747-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 364055**

**Client Sample ID: 1314V3-01-B43 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363922**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20		1.59	1.33		mg/Kg	☼	84	55 - 118
Bis(2-chloroethyl)ether	<0.20		1.59	1.27		mg/Kg	☼	80	53 - 116
1,3-Dichlorobenzene	<0.20		1.59	1.20		mg/Kg	☼	75	56 - 110
1,4-Dichlorobenzene	<0.20		1.59	1.21		mg/Kg	☼	76	57 - 110
1,2-Dichlorobenzene	<0.20		1.59	1.21		mg/Kg	☼	76	56 - 110
2-Methylphenol	<0.20		1.59	1.36		mg/Kg	☼	85	53 - 123
2,2'-oxybis[1-chloropropane]	<0.20		1.59	1.29		mg/Kg	☼	81	22 - 133
N-Nitrosodi-n-propylamine	<0.079		1.59	1.48		mg/Kg	☼	93	56 - 119
Hexachloroethane	<0.20		1.59	1.15		mg/Kg	☼	72	54 - 111
2-Chlorophenol	<0.20		1.59	1.32		mg/Kg	☼	83	57 - 117
Nitrobenzene	<0.039		1.59	1.35		mg/Kg	☼	85	56 - 121
Bis(2-chloroethoxy)methane	<0.20		1.59	1.35		mg/Kg	☼	84	59 - 116
1,2,4-Trichlorobenzene	<0.20		1.59	1.27		mg/Kg	☼	80	60 - 116
Isophorone	<0.20		1.59	1.24		mg/Kg	☼	78	54 - 120
2,4-Dimethylphenol	<0.39		1.59	1.35		mg/Kg	☼	85	50 - 120
Hexachlorobutadiene	<0.20		1.59	1.26		mg/Kg	☼	79	56 - 120
Naphthalene	<0.039		1.59	1.26		mg/Kg	☼	79	58 - 116
2,4-Dichlorophenol	<0.39		1.59	1.35		mg/Kg	☼	85	61 - 116
4-Chloroaniline	<0.79		1.59	1.24		mg/Kg	☼	78	10 - 150
2,4,6-Trichlorophenol	<0.39		1.59	1.21		mg/Kg	☼	76	50 - 120
2,4,5-Trichlorophenol	<0.39		1.59	1.20		mg/Kg	☼	75	42 - 119
Hexachlorocyclopentadiene	<0.79	F1	1.59	0.640	J	mg/Kg	☼	40	10 - 116
2-Methylnaphthalene	<0.079		1.59	1.33		mg/Kg	☼	83	55 - 120
2-Nitroaniline	<0.20		1.59	1.43		mg/Kg	☼	90	52 - 121
2-Chloronaphthalene	<0.20		1.59	1.37		mg/Kg	☼	86	57 - 112
4-Chloro-3-methylphenol	<0.39		1.59	1.33		mg/Kg	☼	83	59 - 117
2,6-Dinitrotoluene	<0.20		1.59	1.48		mg/Kg	☼	93	57 - 118
2-Nitrophenol	<0.39		1.59	1.32		mg/Kg	☼	83	58 - 121
3-Nitroaniline	<0.39		1.59	1.74		mg/Kg	☼	109	20 - 144
Dimethyl phthalate	<0.20		1.59	1.43		mg/Kg	☼	90	60 - 112
2,4-Dinitrophenol	<0.79	F1	3.19	0.735	J	mg/Kg	☼	23	10 - 110
Acenaphthylene	<0.039		1.59	1.34		mg/Kg	☼	84	57 - 116
2,4-Dinitrotoluene	<0.20		1.59	1.41		mg/Kg	☼	88	59 - 119
Acenaphthene	<0.039		1.59	1.37		mg/Kg	☼	86	52 - 113
Dibenzofuran	<0.20		1.59	1.38		mg/Kg	☼	87	59 - 110
4-Nitrophenol	<0.79		3.19	2.30		mg/Kg	☼	72	32 - 123

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# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-1 MS**

**Matrix: Solid**

**Analysis Batch: 364055**

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

**Prep Type: Total/NA**

**Prep Batch: 363922**

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result			Result	Qualifier				
Fluorene	<0.039		1.59	1.40		mg/Kg	☼	88	56 - 115
4-Nitroaniline	<0.39		1.59	2.01		mg/Kg	☼	126	55 - 146
4-Bromophenyl phenyl ether	<0.20		1.59	1.36		mg/Kg	☼	86	61 - 124
Hexachlorobenzene	<0.079		1.59	1.34		mg/Kg	☼	84	62 - 126
Diethyl phthalate	<0.20		1.59	1.42		mg/Kg	☼	89	58 - 117
4-Chlorophenyl phenyl ether	<0.20		1.59	1.38		mg/Kg	☼	86	61 - 111
Pentachlorophenol	<0.79		3.19	1.47		mg/Kg	☼	46	12 - 116
N-Nitrosodiphenylamine	<0.20		1.59	1.44		mg/Kg	☼	90	62 - 117
4,6-Dinitro-2-methylphenol	<0.79	F2	3.19	0.693	J	mg/Kg	☼	22	10 - 110
Phenanthrene	0.064		1.59	1.43		mg/Kg	☼	86	58 - 125
Anthracene	0.0099	J	1.59	1.38		mg/Kg	☼	86	57 - 118
Carbazole	<0.20		1.59	1.84		mg/Kg	☼	116	65 - 137
Di-n-butyl phthalate	<0.20		1.59	1.39		mg/Kg	☼	87	61 - 123
Fluoranthene	0.11		1.59	1.53		mg/Kg	☼	89	61 - 124
Pyrene	0.12	F1	1.59	1.70		mg/Kg	☼	99	60 - 115
Butyl benzyl phthalate	<0.20	F1	1.59	1.60		mg/Kg	☼	101	61 - 115
Benzo[a]anthracene	0.056		1.59	1.49		mg/Kg	☼	90	63 - 115
Chrysene	0.074		1.59	1.42		mg/Kg	☼	84	63 - 118
3,3'-Dichlorobenzidine	<0.20	F1	1.59	0.607	F1	mg/Kg	☼	38	40 - 110
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.59	1.62		mg/Kg	☼	102	62 - 117
Di-n-octyl phthalate	<0.20		1.59	1.36		mg/Kg	☼	85	58 - 129
Benzo[b]fluoranthene	0.11		1.59	1.74		mg/Kg	☼	102	61 - 123
Benzo[k]fluoranthene	0.033	J	1.59	1.94		mg/Kg	☼	120	59 - 125
Benzo[a]pyrene	0.072		1.59	1.49		mg/Kg	☼	89	64 - 122
Indeno[1,2,3-cd]pyrene	0.039		1.59	0.929		mg/Kg	☼	56	50 - 149
Dibenz(a,h)anthracene	<0.039	F1	1.59	0.903	F1	mg/Kg	☼	57	61 - 134
Benzo[g,h,i]perylene	0.091	F1	1.59	0.813	F1	mg/Kg	☼	45	55 - 134
3 & 4 Methylphenol	<0.20		1.59	1.45		mg/Kg	☼	91	55 - 124

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	85		40 - 130
Phenol-d5	85		36 - 123
Nitrobenzene-d5	83		33 - 124
2-Fluorobiphenyl	83		42 - 115
2,4,6-Tribromophenol	77		25 - 130
Terphenyl-d14	98		25 - 150

**Lab Sample ID: 500-120747-1 MSD**

**Matrix: Solid**

**Analysis Batch: 364055**

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

**Prep Type: Total/NA**

**Prep Batch: 363922**

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result			Result	Qualifier					RPD	Limit
Phenol	<0.20		1.59	1.33		mg/Kg	☼	83	55 - 118	0	30
Bis(2-chloroethyl)ether	<0.20		1.59	1.22		mg/Kg	☼	77	53 - 116	4	30
1,3-Dichlorobenzene	<0.20		1.59	1.17		mg/Kg	☼	74	56 - 110	2	30
1,4-Dichlorobenzene	<0.20		1.59	1.17		mg/Kg	☼	74	57 - 110	3	30
1,2-Dichlorobenzene	<0.20		1.59	1.18		mg/Kg	☼	74	56 - 110	3	30
2-Methylphenol	<0.20		1.59	1.43		mg/Kg	☼	90	53 - 123	5	30

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# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

Lab Sample ID: 500-120747-1 MSD

Matrix: Solid

Analysis Batch: 364055

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

Prep Type: Total/NA

Prep Batch: 363922

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.20		1.59	1.26		mg/Kg	☼	79	22 - 133	2	30
N-Nitrosodi-n-propylamine	<0.079		1.59	1.43		mg/Kg	☼	90	56 - 119	4	30
Hexachloroethane	<0.20		1.59	1.09		mg/Kg	☼	69	54 - 111	5	30
2-Chlorophenol	<0.20		1.59	1.30		mg/Kg	☼	82	57 - 117	1	30
Nitrobenzene	<0.039		1.59	1.34		mg/Kg	☼	84	56 - 121	1	30
Bis(2-chloroethoxy)methane	<0.20		1.59	1.26		mg/Kg	☼	79	59 - 116	7	30
1,2,4-Trichlorobenzene	<0.20		1.59	1.23		mg/Kg	☼	77	60 - 116	3	30
Isophorone	<0.20		1.59	1.21		mg/Kg	☼	76	54 - 120	3	30
2,4-Dimethylphenol	<0.39		1.59	1.36		mg/Kg	☼	85	50 - 120	1	30
Hexachlorobutadiene	<0.20		1.59	1.20		mg/Kg	☼	75	56 - 120	5	30
Naphthalene	<0.039		1.59	1.25		mg/Kg	☼	78	58 - 116	1	30
2,4-Dichlorophenol	<0.39		1.59	1.32		mg/Kg	☼	83	61 - 116	2	30
4-Chloroaniline	<0.79		1.59	1.23		mg/Kg	☼	77	10 - 150	1	30
2,4,6-Trichlorophenol	<0.39		1.59	1.28		mg/Kg	☼	80	50 - 120	6	30
2,4,5-Trichlorophenol	<0.39		1.59	1.43		mg/Kg	☼	90	42 - 119	18	30
Hexachlorocyclopentadiene	<0.79	F1	1.59	<0.80	F1	mg/Kg	☼	0	10 - 116	NC	30
2-Methylnaphthalene	<0.079		1.59	1.29		mg/Kg	☼	81	55 - 120	3	30
2-Nitroaniline	<0.20		1.59	1.38		mg/Kg	☼	86	52 - 121	3	30
2-Chloronaphthalene	<0.20		1.59	1.33		mg/Kg	☼	84	57 - 112	3	30
4-Chloro-3-methylphenol	<0.39		1.59	1.33		mg/Kg	☼	84	59 - 117	0	30
2,6-Dinitrotoluene	<0.20		1.59	1.43		mg/Kg	☼	90	57 - 118	3	30
2-Nitrophenol	<0.39		1.59	1.26		mg/Kg	☼	79	58 - 121	4	30
3-Nitroaniline	<0.39		1.59	1.81		mg/Kg	☼	113	20 - 144	4	30
Dimethyl phthalate	<0.20		1.59	1.41		mg/Kg	☼	88	60 - 112	1	30
2,4-Dinitrophenol	<0.79	F1	3.19	<0.80	F1	mg/Kg	☼	0	10 - 110	NC	30
Acenaphthylene	<0.039		1.59	1.31		mg/Kg	☼	82	57 - 116	3	30
2,4-Dinitrotoluene	<0.20		1.59	1.35		mg/Kg	☼	85	59 - 119	4	30
Acenaphthene	<0.039		1.59	1.34		mg/Kg	☼	84	52 - 113	2	30
Dibenzofuran	<0.20		1.59	1.37		mg/Kg	☼	86	59 - 110	1	30
4-Nitrophenol	<0.79		3.19	2.67		mg/Kg	☼	84	32 - 123	15	30
Fluorene	<0.039		1.59	1.37		mg/Kg	☼	86	56 - 115	2	30
4-Nitroaniline	<0.39		1.59	1.95		mg/Kg	☼	122	55 - 146	3	30
4-Bromophenyl phenyl ether	<0.20		1.59	1.37		mg/Kg	☼	86	61 - 124	1	30
Hexachlorobenzene	<0.079		1.59	1.34		mg/Kg	☼	84	62 - 126	0	30
Diethyl phthalate	<0.20		1.59	1.42		mg/Kg	☼	89	58 - 117	0	30
4-Chlorophenyl phenyl ether	<0.20		1.59	1.38		mg/Kg	☼	87	61 - 111	0	30
Pentachlorophenol	<0.79		3.19	1.67		mg/Kg	☼	52	12 - 116	13	30
N-Nitrosodiphenylamine	<0.20		1.59	1.45		mg/Kg	☼	91	62 - 117	1	30
4,6-Dinitro-2-methylphenol	<0.79	F2	3.19	0.335	J F2	mg/Kg	☼	11	10 - 110	70	30
Phenanthrene	0.064		1.59	1.43		mg/Kg	☼	86	58 - 125	0	30
Anthracene	0.0099	J	1.59	1.37		mg/Kg	☼	85	57 - 118	1	30
Carbazole	<0.20		1.59	1.93		mg/Kg	☼	121	65 - 137	4	30
Di-n-butyl phthalate	<0.20		1.59	1.42		mg/Kg	☼	89	61 - 123	3	30
Fluoranthene	0.11		1.59	1.50		mg/Kg	☼	87	61 - 124	2	30
Pyrene	0.12	F1	1.59	2.01	F1	mg/Kg	☼	118	60 - 115	17	30
Butyl benzyl phthalate	<0.20	F1	1.59	1.88	F1	mg/Kg	☼	118	61 - 115	16	30
Benzo[a]anthracene	0.056		1.59	1.49		mg/Kg	☼	90	63 - 115	0	30
Chrysene	0.074		1.59	1.40		mg/Kg	☼	83	63 - 118	1	30

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364055**

**Client Sample ID: 1314V3-01-B43 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363922**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
3,3'-Dichlorobenzidine	<0.20	F1	1.59	0.492	F1	mg/Kg	☼	31	40 - 110	21	30	
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.59	1.90	F1	mg/Kg	☼	119	62 - 117	16	30	
Di-n-octyl phthalate	<0.20		1.59	1.17		mg/Kg	☼	73	58 - 129	15	30	
Benzo[b]fluoranthene	0.11		1.59	1.79		mg/Kg	☼	105	61 - 123	3	30	
Benzo[k]fluoranthene	0.033	J	1.59	1.81		mg/Kg	☼	112	59 - 125	7	30	
Benzo[a]pyrene	0.072		1.59	1.50		mg/Kg	☼	90	64 - 122	1	30	
Indeno[1,2,3-cd]pyrene	0.039		1.59	0.935		mg/Kg	☼	56	50 - 149	1	30	
Dibenz(a,h)anthracene	<0.039	F1	1.59	0.873	F1	mg/Kg	☼	55	61 - 134	3	30	
Benzo[g,h,i]perylene	0.091	F1	1.59	0.954	F1	mg/Kg	☼	54	55 - 134	16	30	
3 & 4 Methylphenol	<0.20		1.59	1.49		mg/Kg	☼	93	55 - 124	3	30	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	85		40 - 130
Phenol-d5	84		36 - 123
Nitrobenzene-d5	80		33 - 124
2-Fluorobiphenyl	81		42 - 115
2,4,6-Tribromophenol	78		25 - 130
Terphenyl-d14	121		25 - 150

## Method: 6010B - SPLP Metals

**Lab Sample ID: LCS 500-364159/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364327**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364159**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Iron	1.00	1.19		mg/L		119	80 - 120	

**Lab Sample ID: LCSD 500-364159/3-A**  
**Matrix: Solid**  
**Analysis Batch: 364327**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 364159**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
		Result	Qualifier							
Iron	1.00	0.971		mg/L		97	80 - 120	20	20	

**Lab Sample ID: LB 500-363354/1-D**  
**Matrix: Solid**  
**Analysis Batch: 364327**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 364159**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
	Result	Qualifier								
Iron	<0.20		0.20	0.20	mg/L		12/08/16 10:20	12/08/16 16:48		1

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# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-363008/1-A**  
**Matrix: Solid**  
**Analysis Batch: 363271**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363008**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.42	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Arsenic	<1.0		1.0	0.46	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Barium	<1.0		1.0	0.18	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Beryllium	<0.40		0.40	0.087	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Boron	<5.0		5.0	0.70	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Cadmium	<0.20		0.20	0.058	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Calcium	<20		20	6.4	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Chromium	0.327	J	1.0	0.17	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Cobalt	<0.50		0.50	0.11	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Copper	<1.0		1.0	0.22	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Iron	<20		20	7.7	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Lead	<0.50		0.50	0.25	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Magnesium	<10		10	4.1	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Manganese	<1.0		1.0	0.20	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Nickel	<1.0		1.0	0.27	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Potassium	<50		50	8.2	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Selenium	<1.0		1.0	0.50	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Silver	<0.50		0.50	0.12	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Sodium	<100		100	13	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Thallium	<1.0		1.0	0.49	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Vanadium	<0.50		0.50	0.15	mg/Kg		11/30/16 15:02	12/01/16 14:45	1
Zinc	<2.0		2.0	0.63	mg/Kg		11/30/16 15:02	12/01/16 14:45	1

**Lab Sample ID: LCS 500-363008/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363271**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	44.9		mg/Kg		90	80 - 120
Arsenic	10.0	8.21		mg/Kg		82	80 - 120
Barium	200	183		mg/Kg		92	80 - 120
Beryllium	5.00	4.74		mg/Kg		95	80 - 120
Boron	100	80.7		mg/Kg		81	80 - 120
Cadmium	5.00	4.49		mg/Kg		90	80 - 120
Calcium	1000	911		mg/Kg		91	80 - 120
Chromium	20.0	20.0		mg/Kg		100	80 - 120
Cobalt	50.0	46.1		mg/Kg		92	80 - 120
Copper	25.0	23.2		mg/Kg		93	80 - 120
Iron	100	110		mg/Kg		110	80 - 120
Lead	10.0	8.85		mg/Kg		88	80 - 120
Magnesium	1000	917		mg/Kg		92	80 - 120
Manganese	50.0	47.2		mg/Kg		94	80 - 120
Nickel	50.0	46.5		mg/Kg		93	80 - 120
Potassium	1000	931		mg/Kg		93	80 - 120
Selenium	10.0	8.63		mg/Kg		86	80 - 120
Silver	5.00	4.25		mg/Kg		85	80 - 120
Sodium	1000	942		mg/Kg		94	80 - 120
Thallium	10.0	8.94		mg/Kg		89	80 - 120

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# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: LCS 500-363008/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363271**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363008**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Vanadium	50.0	46.3		mg/Kg		93	80 - 120
Zinc	50.0	44.9		mg/Kg		90	80 - 120

**Lab Sample ID: 500-120747-17 MS**  
**Matrix: Solid**  
**Analysis Batch: 363271**

**Client Sample ID: 1314V3-01-B22 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 363008**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<1.1	F1	26.9	5.80	F1	mg/Kg	☼	22	75 - 125
Arsenic	2.6		5.38	7.13		mg/Kg	☼	84	75 - 125
Barium	78	F1	108	167		mg/Kg	☼	83	75 - 125
Beryllium	0.40		2.69	2.57		mg/Kg	☼	81	75 - 125
Boron	2.1	J F1	53.8	32.6	F1	mg/Kg	☼	57	75 - 125
Cadmium	0.22		2.69	2.24		mg/Kg	☼	75	75 - 125
Calcium	16000		538	8130	4	mg/Kg	☼	-1482	75 - 125
Chromium	8.3	B	10.8	19.0		mg/Kg	☼	100	75 - 125
Cobalt	6.3		26.9	32.3		mg/Kg	☼	97	75 - 125
Copper	8.0	F1	13.4	19.0		mg/Kg	☼	82	75 - 125
Iron	9400		53.8	11900	4	mg/Kg	☼	4664	75 - 125
Lead	7.4	F1 F2	5.38	15.4	F1	mg/Kg	☼	149	75 - 125
Magnesium	9800		538	5240	4	mg/Kg	☼	-841	75 - 125
Manganese	510		26.9	528	4	mg/Kg	☼	62	75 - 125
Nickel	14		26.9	40.4		mg/Kg	☼	99	75 - 125
Potassium	680	F1	538	1360	F1	mg/Kg	☼	127	75 - 125
Selenium	0.57	F1	5.38	4.01	F1	mg/Kg	☼	64	75 - 125
Silver	<0.28	F1	2.69	1.90	F1	mg/Kg	☼	71	75 - 125
Sodium	1200	F1 F2	538	1610		mg/Kg	☼	82	75 - 125
Thallium	<0.56		5.38	4.47		mg/Kg	☼	83	75 - 125
Vanadium	11		26.9	36.6		mg/Kg	☼	95	75 - 125
Zinc	35	F1	26.9	66.9		mg/Kg	☼	118	75 - 125

**Lab Sample ID: 500-120747-17 MSD**  
**Matrix: Solid**  
**Analysis Batch: 363271**

**Client Sample ID: 1314V3-01-B22 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 363008**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Antimony	<1.1	F1	27.0	5.70	F1	mg/Kg	☼	21	75 - 125	2	20
Arsenic	2.6		5.40	7.58		mg/Kg	☼	92	75 - 125	6	20
Barium	78	F1	108	155	F1	mg/Kg	☼	71	75 - 125	8	20
Beryllium	0.40		2.70	2.54		mg/Kg	☼	80	75 - 125	1	20
Boron	2.1	J F1	54.0	35.2	F1	mg/Kg	☼	61	75 - 125	8	20
Cadmium	0.22		2.70	2.28		mg/Kg	☼	76	75 - 125	1	20
Calcium	16000		540	9700	4	mg/Kg	☼	-1185	75 - 125	18	20
Chromium	8.3	B	10.8	18.0		mg/Kg	☼	90	75 - 125	6	20
Cobalt	6.3		27.0	31.9		mg/Kg	☼	95	75 - 125	1	20
Copper	8.0	F1	13.5	17.0	F1	mg/Kg	☼	67	75 - 125	11	20
Iron	9400		54.0	10900	4	mg/Kg	☼	2889	75 - 125	8	20
Lead	7.4	F1 F2	5.40	11.6	F2	mg/Kg	☼	78	75 - 125	28	20
Magnesium	9800		540	6440	4	mg/Kg	☼	-617	75 - 125	20	20

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# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-17 MSD**  
**Matrix: Solid**  
**Analysis Batch: 363271**

**Client Sample ID: 1314V3-01-B22 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 363008**

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Manganese	510		27.0	491	4	mg/Kg	☼	-76	75 - 125	7	20	
Nickel	14		27.0	38.7		mg/Kg	☼	92	75 - 125	4	20	
Potassium	680	F1	540	1230		mg/Kg	☼	103	75 - 125	10	20	
Selenium	0.57	F1	5.40	3.98	F1	mg/Kg	☼	63	75 - 125	1	20	
Silver	<0.28	F1	2.70	1.94	F1	mg/Kg	☼	72	75 - 125	2	20	
Sodium	1200	F1 F2	540	1300	F1 F2	mg/Kg	☼	24	75 - 125	22	20	
Thallium	<0.56		5.40	4.78		mg/Kg	☼	88	75 - 125	7	20	
Vanadium	11		27.0	37.0		mg/Kg	☼	95	75 - 125	1	20	
Zinc	35	F1	27.0	55.1	F1	mg/Kg	☼	74	75 - 125	19	20	

**Lab Sample ID: 500-120747-17 DU**  
**Matrix: Solid**  
**Analysis Batch: 363271**

**Client Sample ID: 1314V3-01-B22 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 363008**

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<1.1	F1	<1.1		mg/Kg	☼	NC	20
Arsenic	2.6		3.30	F3	mg/Kg	☼	24	20
Barium	78	F1	98.1	F3	mg/Kg	☼	23	20
Beryllium	0.40		0.358		mg/Kg	☼	10	20
Boron	2.1	J F1	1.91	J	mg/Kg	☼	7	20
Cadmium	0.22		0.251		mg/Kg	☼	13	20
Calcium	16000		9080	F3	mg/Kg	☼	56	20
Chromium	8.3	B	8.54		mg/Kg	☼	3	20
Cobalt	6.3		7.50		mg/Kg	☼	17	20
Copper	8.0	F1	7.33		mg/Kg	☼	9	20
Iron	9400		10500		mg/Kg	☼	12	20
Lead	7.4	F1 F2	7.37		mg/Kg	☼	0.1	20
Magnesium	9800		5630	F3	mg/Kg	☼	54	20
Manganese	510		670	F3	mg/Kg	☼	27	20
Nickel	14		15.8		mg/Kg	☼	13	20
Potassium	680	F1	649		mg/Kg	☼	4	20
Selenium	0.57	F1	0.367	J F5	mg/Kg	☼	43	20
Silver	<0.28	F1	<0.28		mg/Kg	☼	NC	20
Sodium	1200	F1 F2	986		mg/Kg	☼	17	20
Thallium	<0.56		<0.56		mg/Kg	☼	NC	20
Vanadium	11		13.7		mg/Kg	☼	20	20
Zinc	35	F1	32.2		mg/Kg	☼	9	20

**Lab Sample ID: LCS 500-363469/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363545**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363469**

Analyte	Spike	LCS		Unit	D	%Rec	Limits
		Added	Result				
Barium	2.00	1.99		mg/L		100	80 - 120
Beryllium	0.0500	0.0505		mg/L		101	80 - 120
Boron	1.00	0.952		mg/L		95	80 - 120
Cadmium	0.0500	0.0499		mg/L		100	80 - 120
Chromium	0.200	0.206		mg/L		103	80 - 120
Cobalt	0.500	0.500		mg/L		100	80 - 120

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: LCS 500-363469/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363545**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363469**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1.00	1.05		mg/L		105	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Manganese	0.500	0.527		mg/L		105	80 - 120
Nickel	0.500	0.504		mg/L		101	80 - 120
Selenium	0.100	0.0913		mg/L		91	80 - 120
Silver	0.0500	0.0499		mg/L		100	80 - 120
Zinc	0.500	0.497	J	mg/L		99	80 - 120

**Lab Sample ID: LCS 500-363557/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363557**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.100	0.106		mg/L		106	80 - 120
Manganese	0.500	0.553		mg/L		111	80 - 120

**Lab Sample ID: LB 500-363365/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363545**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363469**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/16 09:49	12/04/16 08:00	1
Boron	<0.50		0.50	0.050	mg/L		12/03/16 09:49	12/04/16 08:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/16 09:49	12/04/16 08:00	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:00	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:00	1
Iron	<0.40		0.40	0.20	mg/L		12/03/16 09:49	12/04/16 08:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/16 09:49	12/04/16 08:00	1
Manganese	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:00	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:00	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/16 09:49	12/04/16 08:00	1
Silver	<0.025		0.025	0.010	mg/L		12/03/16 09:49	12/04/16 08:00	1
Zinc	0.0260	J	0.50	0.020	mg/L		12/03/16 09:49	12/04/16 08:00	1

**Lab Sample ID: LB 500-363354/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 363557**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:16	12/05/16 22:47	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 08:16	12/05/16 22:47	1

**Lab Sample ID: 500-120747-17 MS**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: 1314V3-01-B22 (0-7)**  
**Prep Type: SPLP East**  
**Prep Batch: 363557**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.94	F1	0.500	1.72	F1	mg/L		156	50 - 150

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

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

Lab Sample ID: 500-120747-17 DU  
Matrix: Solid  
Analysis Batch: 363732

Client Sample ID: 1314V3-01-B22 (0-7)  
Prep Type: SPLP East  
Prep Batch: 363557

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.94	F1	1.11		mg/L		17	20

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

Lab Sample ID: LCS 500-363469/2-A  
Matrix: Solid  
Analysis Batch: 363685

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 363469

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.459		mg/L		92	80 - 120
Thallium	0.100	0.0960		mg/L		96	80 - 120

Lab Sample ID: LB 500-363365/1-B  
Matrix: Solid  
Analysis Batch: 363685

Client Sample ID: Method Blank  
Prep Type: TCLP  
Prep Batch: 363469

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/16 09:49	12/05/16 13:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/16 09:49	12/05/16 13:08	1

## Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-363702/12-A  
Matrix: Solid  
Analysis Batch: 363785

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 363702

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

Lab Sample ID: LCS 500-363702/13-A  
Matrix: Solid  
Analysis Batch: 363785

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 363702

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

Lab Sample ID: LB 500-363365/1-C  
Matrix: Solid  
Analysis Batch: 363785

Client Sample ID: Method Blank  
Prep Type: TCLP  
Prep Batch: 363702

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 10:07	1

Lab Sample ID: 500-120747-1 MS  
Matrix: Solid  
Analysis Batch: 363785

Client Sample ID: 1314V3-01-B43 (0-2)  
Prep Type: TCLP  
Prep Batch: 363702

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000798		mg/L		80	50 - 150

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120747-1

**Lab Sample ID: 500-120747-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: 1314V3-01-B43 (0-2)**  
**Prep Type: TCLP**  
**Prep Batch: 363702**

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

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-363378/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363378**

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

**Lab Sample ID: LCS 500-363378/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363378**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.156		mg/Kg		93	80 - 120

**Lab Sample ID: 500-120747-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: 1314V3-01-B43 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363378**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.031		0.0963	0.128		mg/Kg	☼	101	75 - 125

**Lab Sample ID: 500-120747-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: 1314V3-01-B43 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363378**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.031		0.100	0.125		mg/Kg	☼	94	75 - 125	2	20

**Lab Sample ID: 500-120747-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: 1314V3-01-B43 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363378**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.031		0.0253		mg/Kg	☼	19	20



# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Date Collected: 11/29/16 08:45**

**Date Received: 11/30/16 10:20**

**Lab Sample ID: 500-120747-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 23:01	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 08:13	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:00	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:09	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBJ	TAL CHI
					(Start)	12/02/16 15:06		
					(End)	12/02/16 15:13		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Date Collected: 11/29/16 08:45**

**Date Received: 11/30/16 10:20**

**Lab Sample ID: 500-120747-1**

**Matrix: Solid**

**Percent Solids: 83.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 10:59	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/08/16 02:33	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 14:53	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:16	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Date Collected: 11/29/16 08:55**

**Date Received: 11/30/16 10:20**

**Lab Sample ID: 500-120747-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 23:07	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 08:20	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Lab Sample ID: 500-120747-2**

**Date Collected: 11/29/16 08:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	363685	12/05/16 14:03	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:19	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 15:13 (End) 12/02/16 15:20	JB	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B42 (0-2)**

**Lab Sample ID: 500-120747-2**

**Date Collected: 11/29/16 08:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 81.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 11:24	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 19:04	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 14:57	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:25	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-3**

**Date Collected: 11/29/16 09:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 23:14	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 08:27	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:06	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:20	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 15:20 (End) 12/02/16 15:27	JB	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-3**

**Date Collected: 11/29/16 09:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 11:50	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 19:33	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:01	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:27	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-4**

**Date Collected: 11/29/16 09:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 23:21	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 08:33	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:10	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:22	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 15:27		
					(End)	12/02/16 15:34		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-4**

**Date Collected: 11/29/16 09:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 12:16	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 20:01	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:05	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:30	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B37 (0-2)**

**Lab Sample ID: 500-120747-5**

**Date Collected: 11/29/16 09:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 23:28	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 08:40	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:13	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:23	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBJ	TAL CHI
					(Start)	12/02/16 15:34		
					(End)	12/02/16 15:42		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B37 (0-2)**

**Lab Sample ID: 500-120747-5**

**Date Collected: 11/29/16 09:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 12:41	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 20:29	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:08	PJ1	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		10	363271	12/01/16 17:44	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:32	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-6**

**Date Collected: 11/29/16 13:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 23:34	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:03	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-6**

**Date Collected: 11/29/16 13:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:17	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:25	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 15:42 (End) 12/02/16 15:49	JB	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-6**

**Date Collected: 11/29/16 13:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 13:07	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 20:57	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:13	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:39	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-7**

**Date Collected: 11/29/16 13:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 23:57	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:10	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:20	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:26	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-7**

**Date Collected: 11/29/16 13:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	363480	12/02/16 15:49 (Start) 12/02/16 15:56 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-7**

**Date Collected: 11/29/16 13:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 13:32	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 21:25	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:17	PJ1	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		10	363271	12/01/16 17:48	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:41	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-8**

**Date Collected: 11/29/16 14:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:04	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:16	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:30	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:27	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	12/02/16 15:56 (Start) 12/02/16 16:03 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-8**

**Date Collected: 11/29/16 14:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 13:57	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 21:53	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:21	PJ1	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		10	363271	12/01/16 17:52	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:43	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-9**

**Date Collected: 11/29/16 14:20**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:10	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:23	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:34	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:29	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 16:03		
					(End)	12/02/16 16:10		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-9**

**Date Collected: 11/29/16 14:20**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 14:22	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 22:21	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:32	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-9**

**Date Collected: 11/29/16 14:20**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		10	363271	12/01/16 17:56	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:46	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-10**

**Date Collected: 11/29/16 15:00**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:17	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:30	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:37	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:33	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 16:10		
					(End)	12/02/16 16:17		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-10**

**Date Collected: 11/29/16 15:00**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 14:46	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 22:49	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:37	PJ1	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		10	363271	12/01/16 18:12	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:48	MJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-11**

**Date Collected: 11/29/16 15:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:24	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:37	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:41	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:35	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 16:17		
					(End)	12/02/16 16:24		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-11**

**Date Collected: 11/29/16 15:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 88.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 15:12	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 23:17	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:41	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:51	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-12**

**Date Collected: 11/29/16 15:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:31	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:43	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-12**

**Date Collected: 11/29/16 15:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	363685	12/05/16 14:44	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:36	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 16:24 (End) 12/02/16 16:32	JB	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-12**

**Date Collected: 11/29/16 15:25**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 15:37	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/07/16 23:45	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:45	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:53	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-13**

**Date Collected: 11/29/16 15:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:38	PJ1	TAL CHI
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			364159	12/08/16 10:20	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364327	12/08/16 17:01	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:50	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:48	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:38	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-13**

**Date Collected: 11/29/16 15:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	363480	12/02/16 16:32 (Start) 12/02/16 16:39 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-13**

**Date Collected: 11/29/16 15:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 80.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 16:03	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/08/16 00:13	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:49	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:55	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-14**

**Date Collected: 11/29/16 16:10**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:44	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 09:57	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:51	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:39	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	12/02/16 16:39 (Start) 12/02/16 16:46 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-14**

**Date Collected: 11/29/16 16:10**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 87.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 16:28	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/08/16 00:41	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:53	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:57	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-15**

**Date Collected: 11/29/16 16:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 10:04	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:54	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:41	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 16:46		
					(End)	12/02/16 16:53		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-15**

**Date Collected: 11/29/16 16:15**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 16:54	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/08/16 01:09	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 15:57	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 10:59	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

**Client Sample ID: 1314V3-01-B13 (0-5)**

**Lab Sample ID: 500-120747-16**

**Date Collected: 11/29/16 16:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:51	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 10:24	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 14:58	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:42	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBK	TAL CHI
					(Start)	12/02/16 16:53		
					(End)	12/02/16 17:00		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B13 (0-5)**

**Lab Sample ID: 500-120747-16**

**Date Collected: 11/29/16 16:30**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 93.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 17:19	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/08/16 01:37	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 16:01	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:06	MJD	TAL CHI

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

**Lab Sample ID: 500-120747-17**

**Date Collected: 11/29/16 16:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363354	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363557	12/05/16 08:16	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 00:58	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI
TCLP	Analysis	6010B		1	363545	12/04/16 10:31	PJ1	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363469	12/03/16 09:49	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120747-1

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

**Lab Sample ID: 500-120747-17**

**Date Collected: 11/29/16 16:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	363685	12/05/16 15:01	FXG	TAL CHI
TCLP	Leach	1311			363365	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363702	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 10:44	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 17:00		
					(End)	12/02/16 17:07		
Total/NA	Analysis	Moisture		1	363014	11/30/16 15:42	LWN	TAL CHI

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

**Lab Sample ID: 500-120747-17**

**Date Collected: 11/29/16 16:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 85.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363125	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 17:44	BDW	TAL CHI
Total/NA	Prep	3541			363922	12/07/16 07:41	STW	TAL CHI
Total/NA	Analysis	8270D		1	364055	12/08/16 02:05	GES	TAL CHI
Total/NA	Prep	3050B			363008	11/30/16 15:02	JNH	TAL CHI
Total/NA	Analysis	6010B		1	363271	12/01/16 16:05	PJ1	TAL CHI
Total/NA	Prep	7471B			363378	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:08	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: 500-120747-1

## Laboratory: TestAmerica Chicago

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

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

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

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

# TestAmerica

THE LEADER IN ENVIRONMENTAL

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



500-120747 COC

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

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

## Chain of Custody Record

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

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

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

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

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

Lab Courier: \_\_\_\_\_  
 Shipped: FedEx  
 Hand Delivered: \_\_\_\_\_

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

Client Comments: \_\_\_\_\_

Lab Comments: \_\_\_\_\_



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

## Chain of Custody Record

Lab Job #: 500-120747

Chain of Custody Number: EE 46-07

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
EE		1009006-0046-01								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		Lab Project #		Sampling		# of Containers		Matrix		Comments	
I 74		50012744		Date Time		Matrix					
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix	
Rock Island County, IL		50012744		11-29-16		1505		25		VCL	
Sampler		Lab PM		Date		Time		# of Containers		Matrix	
S-Cooper		D-wright		11-29-16		1525		25		SVCL	
Lab ID		MS/MSD		Date		Time		# of Containers		Matrix	
11		1314V3-01-1315 (7-13)		11-29-16		1505		25		VCL	
12		1314V3-01-1314 (0-6)		11-29-16		1525		25		VCL	
13		1314V3-01-1314 (6-12)		11-29-16		1530		25		VCL	
14		1314V3-01-1312 (0-6)		11-29-16		1610		25		VCL	
15		1314V3-01-1312 (6-11)		11-29-16		1615		25		VCL	
16		1314V3-01-1311 (0-5)		11-29-16		1630		25		VCL	
17		1314V3-01-1322 (0-7)		11-29-16		1655		25		VCL	

Turnaround Time Required (Business Days) \_\_\_\_\_  
 Requested Due Date \_\_\_\_\_  
 Sample Disposal:  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

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

Lab Courier: \_\_\_\_\_  
 Shipped: FEDEX  
 Hand Delivered: \_\_\_\_\_

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

Client Comments: \_\_\_\_\_

Lab Comments: \_\_\_\_\_

# Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120747-1

**Login Number: 120747**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

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



## Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120747-1

**Login Number: 120747**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

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



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-120748-1  
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

*Jodie Bracken*

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### LINKS

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*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: 500-120748-1

**Job ID: 500-120748-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-120748-1

#### Comments

No additional comments.

#### Receipt

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

#### Receipt Exceptions

PCBs were added to lab samples 3-6 per communication with E&E 12/5.

#### GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample was outside the upper control limit: 1314V3-74-B01 (0-2) (500-120748-1). This sample did not contain any target analytes; therefore, re-analysis was not performed.

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

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 363857 had 1 analyte outside control limits: Carbazole. These results have been reported and qualified. (LCS 500-363857/2-A)

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

#### 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: 500-120748-1

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Lab Sample ID: 500-120748-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.023	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.050		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.048		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.025	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.030	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.046		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.017	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.031	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.019	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.010	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.73	J F1	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.7		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	43	F1	0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45	F1	0.21	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	5.0	F1	2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24	F1	0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	48000	B	10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B F1	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.6	F1	0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	9.0		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	13	F1 B	0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400	F1	26	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J F1	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		51	6.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.98	F1	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	34	F1	1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.078	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.95		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	9.0		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.033	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.053		0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.050		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.033	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.035	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.055		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.020	J	0.038	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: 500-120748-1

**Client Sample ID: 1314V3-75-B01 (0-2) (Continued)**

**Lab Sample ID: 500-120748-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
Dibenz(a,h)anthracene	0.012	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.019	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.69	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.9		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	97		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	6.9		2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.50		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.0		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B ^	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	81		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	10000		5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	930		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.46	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Silver	0.10	J	0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	970		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	27		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA
Zinc	89		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	1.1		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0042	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.016		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.49		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.10	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.30		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.80		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.079		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.050		0.021	0.0090	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0076		0.0051	0.0023	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.11		0.043	0.0066	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.19		0.086	0.0079	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.13		0.043	0.0057	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.012	J	0.043	0.0077	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.078	J	0.22	0.050	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.012	J	0.043	0.0060	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.37		0.043	0.0060	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.10		0.043	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: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6) (Continued)**

**Lab Sample ID: 500-120748-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.46		0.043	0.0079	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.43		0.043	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.28		0.043	0.0058	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.31		0.043	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.61		0.043	0.0092	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.20		0.043	0.013	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.36		0.043	0.0083	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.11		0.043	0.011	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.046		0.043	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.089		0.043	0.014	mg/Kg	1	☼	8270D	Total/NA
Antimony	4.2	J	6.1	1.3	mg/Kg	5	☼	6010B	Total/NA
Arsenic	7.9		3.1	1.4	mg/Kg	5	☼	6010B	Total/NA
Barium	210		3.1	0.56	mg/Kg	5	☼	6010B	Total/NA
Beryllium	1.4		1.2	0.26	mg/Kg	5	☼	6010B	Total/NA
Boron	27		15	2.1	mg/Kg	5	☼	6010B	Total/NA
Cadmium	1.1		0.61	0.18	mg/Kg	5	☼	6010B	Total/NA
Calcium	10000	B	61	20	mg/Kg	5	☼	6010B	Total/NA
Chromium	15	B	3.1	0.53	mg/Kg	5	☼	6010B	Total/NA
Cobalt	8.1		1.5	0.35	mg/Kg	5	☼	6010B	Total/NA
Copper	52		3.1	0.66	mg/Kg	5	☼	6010B	Total/NA
Iron	40000	B ^	61	24	mg/Kg	5	☼	6010B	Total/NA
Lead	140		1.5	0.76	mg/Kg	5	☼	6010B	Total/NA
Magnesium	1800		31	12	mg/Kg	5	☼	6010B	Total/NA
Manganese	440		3.1	0.61	mg/Kg	5	☼	6010B	Total/NA
Nickel	24	B	3.1	0.83	mg/Kg	5	☼	6010B	Total/NA
Potassium	1000		150	25	mg/Kg	5	☼	6010B	Total/NA
Selenium	2.0	J	3.1	1.5	mg/Kg	5	☼	6010B	Total/NA
Sodium	900		310	40	mg/Kg	5	☼	6010B	Total/NA
Thallium	2.8	J	3.1	1.5	mg/Kg	5	☼	6010B	Total/NA
Vanadium	27		1.5	0.45	mg/Kg	5	☼	6010B	Total/NA
Zinc	240		6.1	1.9	mg/Kg	5	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.35	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	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.079		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.21	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.071		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Antimony	0.0098		0.0060	0.0060	mg/L	1		6020A	TCLP
Antimony	0.0063		0.0060	0.0060	mg/L	1		6020A	SPLP East
Mercury	0.056		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.042		0.020	0.0088	mg/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)D (Continued)**

**Lab Sample ID: 500-120748-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0088		0.0050	0.0022	mg/Kg	1	☼	☼	8260B	Total/NA
Naphthalene	0.071		0.039	0.0061	mg/Kg	1	☼	☼	8270D	Total/NA
2-Methylnaphthalene	0.13		0.080	0.0073	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthylene	0.13		0.039	0.0052	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthene	0.026	J	0.039	0.0071	mg/Kg	1	☼	☼	8270D	Total/NA
Dibenzofuran	0.054	J	0.20	0.046	mg/Kg	1	☼	☼	8270D	Total/NA
Fluorene	0.025	J	0.039	0.0055	mg/Kg	1	☼	☼	8270D	Total/NA
Phenanthrene	0.49		0.039	0.0055	mg/Kg	1	☼	☼	8270D	Total/NA
Anthracene	0.15		0.039	0.0066	mg/Kg	1	☼	☼	8270D	Total/NA
Fluoranthene	0.77		0.039	0.0073	mg/Kg	1	☼	☼	8270D	Total/NA
Pyrene	0.75		0.039	0.0078	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]anthracene	0.43		0.039	0.0053	mg/Kg	1	☼	☼	8270D	Total/NA
Chrysene	0.45		0.039	0.011	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.80		0.039	0.0085	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.27		0.039	0.012	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]pyrene	0.50		0.039	0.0076	mg/Kg	1	☼	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.039	0.010	mg/Kg	1	☼	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.057		0.039	0.0076	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.13		0.039	0.013	mg/Kg	1	☼	☼	8270D	Total/NA
Antimony	2.9	J	5.3	1.1	mg/Kg	5	☼	☼	6010B	Total/NA
Arsenic	6.6		2.6	1.2	mg/Kg	5	☼	☼	6010B	Total/NA
Barium	190		2.6	0.48	mg/Kg	5	☼	☼	6010B	Total/NA
Beryllium	1.8		1.1	0.23	mg/Kg	5	☼	☼	6010B	Total/NA
Boron	41		13	1.8	mg/Kg	5	☼	☼	6010B	Total/NA
Cadmium	0.98		0.53	0.15	mg/Kg	5	☼	☼	6010B	Total/NA
Calcium	9600	B	53	17	mg/Kg	5	☼	☼	6010B	Total/NA
Chromium	14	B	2.6	0.45	mg/Kg	5	☼	☼	6010B	Total/NA
Cobalt	7.8		1.3	0.30	mg/Kg	5	☼	☼	6010B	Total/NA
Copper	41		2.6	0.57	mg/Kg	5	☼	☼	6010B	Total/NA
Iron	39000	B ^	53	20	mg/Kg	5	☼	☼	6010B	Total/NA
Lead	150		1.3	0.66	mg/Kg	5	☼	☼	6010B	Total/NA
Magnesium	1500		26	11	mg/Kg	5	☼	☼	6010B	Total/NA
Manganese	410		2.6	0.52	mg/Kg	5	☼	☼	6010B	Total/NA
Nickel	23	B	2.6	0.72	mg/Kg	5	☼	☼	6010B	Total/NA
Potassium	980		130	22	mg/Kg	5	☼	☼	6010B	Total/NA
Selenium	1.9	J	2.6	1.3	mg/Kg	5	☼	☼	6010B	Total/NA
Sodium	790		260	35	mg/Kg	5	☼	☼	6010B	Total/NA
Thallium	2.5	J	2.6	1.3	mg/Kg	5	☼	☼	6010B	Total/NA
Vanadium	25		1.3	0.39	mg/Kg	5	☼	☼	6010B	Total/NA
Zinc	250		5.3	1.7	mg/Kg	5	☼	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.24	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	0.017	J	0.025	0.010	mg/L	1			6010B	TCLP
Iron	0.33	J	0.40	0.20	mg/L	1			6010B	TCLP
Lead	0.0099		0.0075	0.0075	mg/L	1			6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.017	J	0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.43	J	0.50	0.020	mg/L	1			6010B	TCLP
Lead	0.097		0.0075	0.0075	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: 500-120748-1

## Client Sample ID: 1314V3-21-B02 (0-6)D (Continued)

## Lab Sample ID: 500-120748-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.25		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.075		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: 1314V3-21-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
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

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: 500-120748-1

## 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
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: 500-120748-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120748-1	1314V3-74-B01 (0-2)	Solid	11/29/16 09:55	11/30/16 10:20
500-120748-2	1314V3-75-B01 (0-2)	Solid	11/29/16 10:05	11/30/16 10:20
500-120748-3	1314V3-21-B02 (0-6)	Solid	11/29/16 11:45	11/30/16 10:20
500-120748-4	1314V3-21-B02 (0-6)D	Solid	11/29/16 11:45	11/30/16 10:20
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

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

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Lab Sample ID: 500-120748-1**

**Date Collected: 11/29/16 09:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128	X	70 - 120	11/30/16 13:20	12/02/16 19:55	1
Dibromofluoromethane	98		75 - 120	11/30/16 13:20	12/02/16 19:55	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	11/30/16 13:20	12/02/16 19:55	1
Toluene-d8 (Surr)	108		75 - 123	11/30/16 13:20	12/02/16 19:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Lab Sample ID: 500-120748-1**

**Date Collected: 11/29/16 09:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Phenanthrene</b>	<b>0.023</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Carbazole	<0.19	*	0.19	0.093	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Fluoranthene</b>	<b>0.050</b>		0.037	0.0069	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Pyrene</b>	<b>0.048</b>		0.037	0.0074	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Benzo[a]anthracene</b>	<b>0.025</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Lab Sample ID: 500-120748-1**

**Date Collected: 11/29/16 09:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.030</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Benzo[b]fluoranthene</b>	<b>0.046</b>		0.037	0.0080	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Benzo[k]fluoranthene</b>	<b>0.017</b>	<b>J</b>	0.037	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Benzo[a]pyrene</b>	<b>0.031</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0096	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Dibenz(a,h)anthracene</b>	<b>0.010</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Benzo[g,h,i]perylene</b>	<b>0.024</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/06/16 16:39	12/07/16 12:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	99		40 - 130				12/06/16 16:39	12/07/16 12:48	1
Phenol-d5	95		36 - 123				12/06/16 16:39	12/07/16 12:48	1
Nitrobenzene-d5	85		33 - 124				12/06/16 16:39	12/07/16 12:48	1
2-Fluorobiphenyl	79		42 - 115				12/06/16 16:39	12/07/16 12:48	1
2,4,6-Tribromophenol	55		25 - 130				12/06/16 16:39	12/07/16 12:48	1
Terphenyl-d14	89		25 - 150				12/06/16 16:39	12/07/16 12:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.73</b>	<b>J F1</b>	1.0	0.21	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Arsenic</b>	<b>3.7</b>		0.51	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Barium</b>	<b>43</b>	<b>F1</b>	0.51	0.094	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Beryllium</b>	<b>0.45</b>	<b>F1</b>	0.21	0.044	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Boron</b>	<b>5.0</b>	<b>F1</b>	2.6	0.36	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Cadmium</b>	<b>0.24</b>	<b>F1</b>	0.10	0.030	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Calcium</b>	<b>48000</b>	<b>B</b>	10	3.3	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Chromium</b>	<b>10</b>	<b>B F1</b>	0.51	0.088	mg/Kg	☼	12/02/16 09:27	12/03/16 21:26	1
<b>Cobalt</b>	<b>5.6</b>	<b>F1</b>	0.26	0.058	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Copper</b>	<b>12</b>		0.51	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Iron</b>	<b>13000</b>	<b>B ^</b>	10	4.0	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Lead</b>	<b>9.0</b>		0.26	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Magnesium</b>	<b>24000</b>		5.1	2.1	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Manganese</b>	<b>330</b>		0.51	0.10	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Nickel</b>	<b>13</b>	<b>F1 B</b>	0.51	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Potassium</b>	<b>1400</b>	<b>F1</b>	26	4.2	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Selenium</b>	<b>0.31</b>	<b>J F1</b>	0.51	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Sodium</b>	<b>640</b>		51	6.8	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Thallium</b>	<b>0.98</b>	<b>F1</b>	0.51	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Vanadium</b>	<b>16</b>		0.26	0.075	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1
<b>Zinc</b>	<b>34</b>	<b>F1</b>	1.0	0.32	mg/Kg	☼	12/02/16 09:27	12/02/16 22:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.58</b>		0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 22:24	1
<b>Boron</b>	<b>0.078</b>	<b>J B</b>	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:24	1

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Lab Sample ID: 500-120748-1**

**Date Collected: 11/29/16 09:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0025</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Iron	<0.40		0.40	0.20	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
<b>Manganese</b>	<b>0.95</b>		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Silver	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:24	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/02/16 14:06	12/03/16 22:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L	-	12/02/16 14:10	12/05/16 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/02/16 14:06	12/05/16 12:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/02/16 14:06	12/05/16 12:20	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/02/16 10:45	12/05/16 12:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.022</b>		0.017	0.0091	mg/Kg	☼	11/30/16 14:45	12/02/16 09:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.0</b>		0.2	0.2	SU	-		12/02/16 17:07	1

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

**Date Collected: 11/29/16 10:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.5**

## 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	☼	11/30/16 13:20	12/02/16 20:20	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 20:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	11/30/16 13:20	12/02/16 20:20	1
Dibromofluoromethane	97		75 - 120	11/30/16 13:20	12/02/16 20:20	1
1,2-Dichloroethane-d4 (Surr)	99		69 - 134	11/30/16 13:20	12/02/16 20:20	1
Toluene-d8 (Surr)	103		75 - 123	11/30/16 13:20	12/02/16 20:20	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	☼	12/06/16 16:39	12/07/16 13:16	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

**Date Collected: 11/29/16 10:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.5**

**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	☼	12/06/16 16:39	12/07/16 13:16	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Phenanthrene</b>	<b>0.033</b>	<b>J</b>	0.038	0.0054	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Carbazole	<0.19	*	0.19	0.097	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Fluoranthene</b>	<b>0.053</b>		0.038	0.0072	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Pyrene</b>	<b>0.050</b>		0.038	0.0077	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Benzo[a]anthracene</b>	<b>0.033</b>	<b>J</b>	0.038	0.0052	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

**Date Collected: 11/29/16 10:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.035</b>	<b>J</b>	0.038	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Benzo[b]fluoranthene</b>	<b>0.055</b>		0.038	0.0083	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Benzo[k]fluoranthene</b>	<b>0.020</b>	<b>J</b>	0.038	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Benzo[a]pyrene</b>	<b>0.041</b>		0.038	0.0075	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.024</b>	<b>J</b>	0.038	0.010	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Dibenz(a,h)anthracene</b>	<b>0.012</b>	<b>J</b>	0.038	0.0075	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Benzo[g,h,i]perylene</b>	<b>0.019</b>	<b>J</b>	0.038	0.012	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	12/06/16 16:39	12/07/16 13:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	78		40 - 130				12/06/16 16:39	12/07/16 13:16	1
Phenol-d5	83		36 - 123				12/06/16 16:39	12/07/16 13:16	1
Nitrobenzene-d5	66		33 - 124				12/06/16 16:39	12/07/16 13:16	1
2-Fluorobiphenyl	62		42 - 115				12/06/16 16:39	12/07/16 13:16	1
2,4,6-Tribromophenol	40		25 - 130				12/06/16 16:39	12/07/16 13:16	1
Terphenyl-d14	78		25 - 150				12/06/16 16:39	12/07/16 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.69</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Arsenic</b>	<b>5.9</b>		0.58	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Barium</b>	<b>97</b>		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Beryllium</b>	<b>0.71</b>		0.23	0.050	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Boron</b>	<b>6.9</b>		2.9	0.41	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Cadmium</b>	<b>0.50</b>		0.12	0.034	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Calcium</b>	<b>23000</b>	<b>B</b>	12	3.7	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.58	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 21:48	1
<b>Cobalt</b>	<b>6.0</b>		0.29	0.065	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Copper</b>	<b>16</b>		0.58	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Iron</b>	<b>17000</b>	<b>B ^</b>	12	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Lead</b>	<b>81</b>		0.29	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Magnesium</b>	<b>10000</b>		5.8	2.4	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Manganese</b>	<b>440</b>		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Nickel</b>	<b>15</b>	<b>B</b>	0.58	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Potassium</b>	<b>930</b>		29	4.7	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Selenium</b>	<b>0.46</b>	<b>J</b>	0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Silver</b>	<b>0.10</b>	<b>J</b>	0.29	0.068	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Sodium</b>	<b>970</b>		58	7.6	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Thallium</b>	<b>1.4</b>		0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Vanadium</b>	<b>27</b>		0.29	0.085	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1
<b>Zinc</b>	<b>89</b>		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/02/16 22:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>1.1</b>		0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 22:29	1
<b>Boron</b>	<b>0.061</b>	<b>J B</b>	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:29	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

**Date Collected: 11/29/16 10:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0042</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
Iron	<0.40		0.40	0.20	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
<b>Lead</b>	<b>0.016</b>		0.0075	0.0075	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
<b>Manganese</b>	<b>0.49</b>		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
Silver	<0.025		0.025	0.010	mg/L	-	12/02/16 14:06	12/03/16 22:29	1
<b>Zinc</b>	<b>0.10</b>	<b>J</b>	0.50	0.020	mg/L	-	12/02/16 14:06	12/03/16 22:29	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.30</b>		0.0075	0.0075	mg/L	-	12/02/16 14:10	12/05/16 22:02	1
<b>Manganese</b>	<b>0.80</b>		0.025	0.010	mg/L	-	12/02/16 14:10	12/05/16 22:02	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	-	12/02/16 14:06	12/05/16 12:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/02/16 14:06	12/05/16 12:23	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	-	12/02/16 10:45	12/05/16 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.079</b>		0.019	0.010	mg/Kg	☼	11/30/16 14:45	12/02/16 09:29	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU	-		12/02/16 17:21	1

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 75.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.050</b>		0.021	0.0090	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Benzene	<0.0021		0.0021	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
<b>2-Butanone (MEK)</b>	<b>0.0076</b>		0.0051	0.0023	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Chloroform	<0.0021		0.0021	0.00071	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00057	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Dibromochloromethane	<0.0021		0.0021	0.00067	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,1-Dichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00072	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Ethylbenzene	<0.0021		0.0021	0.00098	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00060	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00091	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00088	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Vinyl chloride	<0.0021		0.0021	0.00091	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	11/30/16 13:20	12/02/16 20:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	11/30/16 13:20	12/02/16 20:45	1
Dibromofluoromethane	96		75 - 120	11/30/16 13:20	12/02/16 20:45	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134	11/30/16 13:20	12/02/16 20:45	1
Toluene-d8 (Surr)	104		75 - 123	11/30/16 13:20	12/02/16 20:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.22		0.22	0.095	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.064	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
1,3-Dichlorobenzene	<0.22		0.22	0.048	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
1,4-Dichlorobenzene	<0.22		0.22	0.055	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 75.4**

**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	☼	12/06/16 16:39	12/07/16 14:12	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Hexachloroethane	<0.22		0.22	0.065	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2-Chlorophenol	<0.22		0.22	0.073	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
1,2,4-Trichlorobenzene	<0.22		0.22	0.046	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Isophorone	<0.22		0.22	0.048	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Hexachlorobutadiene	<0.22		0.22	0.067	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Naphthalene</b>	<b>0.11</b>		0.043	0.0066	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,4,5-Trichlorophenol	<0.43		0.43	0.098	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Hexachlorocyclopentadiene	<0.86		0.86	0.25	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>2-Methylnaphthalene</b>	<b>0.19</b>		0.086	0.0079	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2-Chloronaphthalene	<0.22		0.22	0.047	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,6-Dinitrotoluene	<0.22		0.22	0.084	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Dimethyl phthalate	<0.22		0.22	0.056	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,4-Dinitrophenol	<0.86		0.86	0.75	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Acenaphthylene</b>	<b>0.13</b>		0.043	0.0057	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
2,4-Dinitrotoluene	<0.22		0.22	0.068	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Acenaphthene</b>	<b>0.012 J</b>		0.043	0.0077	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Dibenzofuran</b>	<b>0.078 J</b>		0.22	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
4-Nitrophenol	<0.86		0.86	0.41	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Fluorene</b>	<b>0.012 J</b>		0.043	0.0060	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Hexachlorobenzene	<0.086		0.086	0.0099	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.050	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Pentachlorophenol	<0.86		0.86	0.69	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
4,6-Dinitro-2-methylphenol	<0.86		0.86	0.34	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Phenanthrene</b>	<b>0.37</b>		0.043	0.0060	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Anthracene</b>	<b>0.10</b>		0.043	0.0072	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Carbazole	<0.22 *		0.22	0.11	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Di-n-butyl phthalate	<0.22		0.22	0.065	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Fluoranthene</b>	<b>0.46</b>		0.043	0.0079	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Pyrene</b>	<b>0.43</b>		0.043	0.0085	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Benzo[a]anthracene</b>	<b>0.28</b>		0.043	0.0058	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1

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# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 75.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.31</b>		0.043	0.012	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.060	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.078	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
Di-n-octyl phthalate	<0.22		0.22	0.070	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Benzo[b]fluoranthene</b>	<b>0.61</b>		0.043	0.0092	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Benzo[k]fluoranthene</b>	<b>0.20</b>		0.043	0.013	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Benzo[a]pyrene</b>	<b>0.36</b>		0.043	0.0083	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.11</b>		0.043	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Dibenz(a,h)anthracene</b>	<b>0.046</b>		0.043	0.0083	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Benzo[g,h,i]perylene</b>	<b>0.089</b>		0.043	0.014	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
3 & 4 Methylphenol	<0.22		0.22	0.071	mg/Kg	☼	12/06/16 16:39	12/07/16 14:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	101		40 - 130				12/06/16 16:39	12/07/16 14:12	1
Phenol-d5	103		36 - 123				12/06/16 16:39	12/07/16 14:12	1
Nitrobenzene-d5	84		33 - 124				12/06/16 16:39	12/07/16 14:12	1
2-Fluorobiphenyl	80		42 - 115				12/06/16 16:39	12/07/16 14:12	1
2,4,6-Tribromophenol	74		25 - 130				12/06/16 16:39	12/07/16 14:12	1
Terphenyl-d14	93		25 - 150				12/06/16 16:39	12/07/16 14:12	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	0.0076	mg/Kg	☼	12/06/16 19:00	12/07/16 13:00	1
PCB-1221	<0.021		0.021	0.0094	mg/Kg	☼	12/06/16 19:00	12/07/16 13:00	1
PCB-1232	<0.021		0.021	0.0093	mg/Kg	☼	12/06/16 19:00	12/07/16 13:00	1
PCB-1242	<0.021		0.021	0.0070	mg/Kg	☼	12/06/16 19:00	12/07/16 13:00	1
PCB-1248	<0.021		0.021	0.0084	mg/Kg	☼	12/06/16 19:00	12/07/16 13:00	1
PCB-1254	<0.021		0.021	0.0046	mg/Kg	☼	12/06/16 19:00	12/07/16 13:00	1
PCB-1260	<0.021		0.021	0.011	mg/Kg	☼	12/06/16 19:00	12/07/16 13:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	93		41 - 124				12/06/16 19:00	12/07/16 13:00	1
DCB Decachlorobiphenyl	88		47 - 127				12/06/16 19:00	12/07/16 13:00	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>4.2</b>	<b>J</b>	6.1	1.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Arsenic</b>	<b>7.9</b>		3.1	1.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Barium</b>	<b>210</b>		3.1	0.56	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Beryllium</b>	<b>1.4</b>		1.2	0.26	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Boron</b>	<b>27</b>		15	2.1	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Cadmium</b>	<b>1.1</b>		0.61	0.18	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Calcium</b>	<b>10000</b>	<b>B</b>	61	20	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Chromium</b>	<b>15</b>	<b>B</b>	3.1	0.53	mg/Kg	☼	12/02/16 09:27	12/03/16 21:53	5
<b>Cobalt</b>	<b>8.1</b>		1.5	0.35	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Copper</b>	<b>52</b>		3.1	0.66	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Iron</b>	<b>40000</b>	<b>B ^</b>	61	24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Lead</b>	<b>140</b>		1.5	0.76	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Magnesium</b>	<b>1800</b>		31	12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
<b>Manganese</b>	<b>440</b>		3.1	0.61	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

Date Collected: 11/29/16 11:45

Matrix: Solid

Date Received: 11/30/16 10:20

Percent Solids: 75.4

## 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 23:03	5
Potassium	1000		150	25	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
Selenium	2.0	J	3.1	1.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
Silver	<1.5		1.5	0.36	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
Sodium	900		310	40	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
Thallium	2.8	J	3.1	1.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
Vanadium	27		1.5	0.45	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5
Zinc	240		6.1	1.9	mg/Kg	☼	12/02/16 09:27	12/02/16 23:03	5

## 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		12/02/16 14:06	12/03/16 22:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 22:34	1
Boron	0.35	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:34	1
Cadmium	0.0022	J	0.0050	0.0020	mg/L		12/02/16 14:06	12/03/16 22:34	1
Chromium	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:34	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:34	1
Iron	<0.40		0.40	0.20	mg/L		12/02/16 14:06	12/03/16 22:34	1
Lead	0.079		0.0075	0.0075	mg/L		12/02/16 14:06	12/03/16 22:34	1
Manganese	3.1		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:34	1
Nickel	0.012	J	0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:34	1
Selenium	<0.050		0.050	0.020	mg/L		12/02/16 14:06	12/03/16 22:34	1
Silver	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:34	1
Zinc	0.21	J	0.50	0.020	mg/L		12/02/16 14:06	12/03/16 22:34	1

## Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.071		0.0075	0.0075	mg/L		12/02/16 14:10	12/05/16 22:09	1
Manganese	0.24		0.025	0.010	mg/L		12/02/16 14:10	12/05/16 22:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0098		0.0060	0.0060	mg/L		12/02/16 14:06	12/05/16 12:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/02/16 14:06	12/05/16 12:27	1

## Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0063		0.0060	0.0060	mg/L		12/02/16 14:10	12/05/16 17:22	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		12/02/16 10:45	12/05/16 12:19	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.056		0.020	0.010	mg/Kg	☼	11/30/16 14:45	12/02/16 09:31	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/16 17:29	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.042</b>		0.020	0.0088	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
<b>2-Butanone (MEK)</b>	<b>0.0088</b>		0.0050	0.0022	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Vinyl acetate	<0.0050		0.0050	0.0018	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	11/30/16 13:20	12/02/16 21:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	11/30/16 13:20	12/02/16 21:09	1
Dibromofluoromethane	95		75 - 120	11/30/16 13:20	12/02/16 21:09	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	11/30/16 13:20	12/02/16 21:09	1
Toluene-d8 (Surr)	102		75 - 123	11/30/16 13:20	12/02/16 21:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Naphthalene</b>	<b>0.071</b>		0.039	0.0061	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>2-Methylnaphthalene</b>	<b>0.13</b>		0.080	0.0073	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,4-Dinitrophenol	<0.80		0.80	0.69	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Acenaphthylene</b>	<b>0.13</b>		0.039	0.0052	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Acenaphthene</b>	<b>0.026 J</b>		0.039	0.0071	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Dibenzofuran</b>	<b>0.054 J</b>		0.20	0.046	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Fluorene</b>	<b>0.025 J</b>		0.039	0.0055	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Phenanthrene</b>	<b>0.49</b>		0.039	0.0055	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Anthracene</b>	<b>0.15</b>		0.039	0.0066	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Carbazole	<0.20 *		0.20	0.098	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Fluoranthene</b>	<b>0.77</b>		0.039	0.0073	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Pyrene</b>	<b>0.75</b>		0.039	0.0078	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Benzo[a]anthracene</b>	<b>0.43</b>		0.039	0.0053	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.45</b>		0.039	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Benzo[b]fluoranthene</b>	<b>0.80</b>		0.039	0.0085	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Benzo[k]fluoranthene</b>	<b>0.27</b>		0.039	0.012	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Benzo[a]pyrene</b>	<b>0.50</b>		0.039	0.0076	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.14</b>		0.039	0.010	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Dibenz(a,h)anthracene</b>	<b>0.057</b>		0.039	0.0076	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
<b>Benzo[g,h,i]perylene</b>	<b>0.13</b>		0.039	0.013	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/06/16 16:39	12/07/16 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		40 - 130	12/06/16 16:39	12/07/16 14:40	1
Phenol-d5	84		36 - 123	12/06/16 16:39	12/07/16 14:40	1
Nitrobenzene-d5	71		33 - 124	12/06/16 16:39	12/07/16 14:40	1
2-Fluorobiphenyl	68		42 - 115	12/06/16 16:39	12/07/16 14:40	1
2,4,6-Tribromophenol	53		25 - 130	12/06/16 16:39	12/07/16 14:40	1
Terphenyl-d14	78		25 - 150	12/06/16 16:39	12/07/16 14:40	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 13:15	1
PCB-1221	<0.021		0.021	0.0091	mg/Kg	☼	12/06/16 19:00	12/07/16 13:15	1
PCB-1232	<0.021		0.021	0.0090	mg/Kg	☼	12/06/16 19:00	12/07/16 13:15	1
PCB-1242	<0.021		0.021	0.0068	mg/Kg	☼	12/06/16 19:00	12/07/16 13:15	1
PCB-1248	<0.021		0.021	0.0082	mg/Kg	☼	12/06/16 19:00	12/07/16 13:15	1
PCB-1254	<0.021		0.021	0.0045	mg/Kg	☼	12/06/16 19:00	12/07/16 13:15	1
PCB-1260	<0.021		0.021	0.010	mg/Kg	☼	12/06/16 19:00	12/07/16 13:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		41 - 124	12/06/16 19:00	12/07/16 13:15	1
DCB Decachlorobiphenyl	87		47 - 127	12/06/16 19:00	12/07/16 13:15	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>2.9</b>	<b>J</b>	5.3	1.1	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Arsenic</b>	<b>6.6</b>		2.6	1.2	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Barium</b>	<b>190</b>		2.6	0.48	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Beryllium</b>	<b>1.8</b>		1.1	0.23	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Boron</b>	<b>41</b>		13	1.8	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Cadmium</b>	<b>0.98</b>		0.53	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Calcium</b>	<b>9600</b>	<b>B</b>	53	17	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Chromium</b>	<b>14</b>	<b>B</b>	2.6	0.45	mg/Kg	☼	12/02/16 09:27	12/03/16 21:57	5
<b>Cobalt</b>	<b>7.8</b>		1.3	0.30	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Copper</b>	<b>41</b>		2.6	0.57	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Iron</b>	<b>39000</b>	<b>B ^</b>	53	20	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Lead</b>	<b>150</b>		1.3	0.66	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Magnesium</b>	<b>1500</b>		26	11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
<b>Manganese</b>	<b>410</b>		2.6	0.52	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	23	B	2.6	0.72	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
Potassium	980		130	22	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
Selenium	1.9	J	2.6	1.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
Silver	<1.3		1.3	0.31	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
Sodium	790		260	35	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
Thallium	2.5	J	2.6	1.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
Vanadium	25		1.3	0.39	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5
Zinc	250		5.3	1.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:10	5

**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		12/02/16 14:06	12/03/16 22:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 22:39	1
Boron	0.24	J B	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 22:39	1
Cadmium	0.0030	J	0.0050	0.0020	mg/L		12/02/16 14:06	12/03/16 22:39	1
Chromium	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:39	1
Cobalt	0.017	J	0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:39	1
Iron	0.33	J	0.40	0.20	mg/L		12/02/16 14:06	12/03/16 22:39	1
Lead	0.0099		0.0075	0.0075	mg/L		12/02/16 14:06	12/03/16 22:39	1
Manganese	2.3		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:39	1
Nickel	0.017	J	0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:39	1
Selenium	<0.050		0.050	0.020	mg/L		12/02/16 14:06	12/03/16 22:39	1
Silver	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 22:39	1
Zinc	0.43	J	0.50	0.020	mg/L		12/02/16 14:06	12/03/16 22:39	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.097		0.0075	0.0075	mg/L		12/02/16 14:10	12/05/16 22:31	1
Manganese	0.25		0.025	0.010	mg/L		12/02/16 14:10	12/05/16 22:31	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		12/02/16 14:06	12/05/16 12:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/02/16 14:06	12/05/16 12:30	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		12/02/16 10:45	12/05/16 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.075		0.018	0.0094	mg/Kg	☼	11/30/16 14:45	12/02/16 09:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/16 17:36	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120748-1

**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
1,1,1,2-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: 500-120748-1

**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
<b>Naphthalene</b>	<b>0.020</b>	<b>J</b>	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
<b>2-Methylnaphthalene</b>	<b>0.056</b>	<b>J</b>	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
<b>Acenaphthylene</b>	<b>0.033</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.13</b>		0.042	0.0059	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
<b>Anthracene</b>	<b>0.032</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.19</b>		0.042	0.0079	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
<b>Pyrene</b>	<b>0.18</b>		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
<b>Benzo[a]anthracene</b>	<b>0.11</b>		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: 500-120748-1

**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
<b>Chrysene</b>	<b>0.12</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.20</b>		0.042	0.0092	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
<b>Benzo[k]fluoranthene</b>	<b>0.071</b>		0.042	0.013	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
<b>Benzo[a]pyrene</b>	<b>0.13</b>		0.042	0.0082	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.061</b>		0.042	0.011	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
<b>Dibenz(a,h)anthracene</b>	<b>0.022</b>	J	0.042	0.0082	mg/Kg	☼	12/06/16 16:39	12/07/16 13:44	1
<b>Benzo[g,h,i]perylene</b>	<b>0.052</b>		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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Antimony</b>	<b>2.2</b>	J	6.2	1.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Arsenic</b>	<b>9.0</b>		3.1	1.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Barium</b>	<b>140</b>		3.1	0.56	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Beryllium</b>	<b>1.5</b>		1.2	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Boron</b>	<b>22</b>		15	2.2	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Cadmium</b>	<b>1.4</b>		0.62	0.18	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Calcium</b>	<b>6400</b>	B	62	20	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Chromium</b>	<b>14</b>	B	3.1	0.53	mg/Kg	☼	12/02/16 09:27	12/03/16 22:08	5
<b>Cobalt</b>	<b>8.4</b>		1.5	0.35	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Copper</b>	<b>70</b>		3.1	0.67	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Iron</b>	<b>48000</b>	B ^	62	24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Lead</b>	<b>82</b>		1.5	0.77	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Magnesium</b>	<b>1100</b>		31	13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:16	5
<b>Manganese</b>	<b>500</b>		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: 500-120748-1

**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: 500-120748-1

**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: 500-120748-1

**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: 500-120748-1

**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
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.070</b>	<b>J</b>	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
<b>PCB-1260</b>	<b>0.012</b>	<b>J</b>	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
<b>Antimony</b>	<b>0.32</b>	<b>J</b>	1.1	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Arsenic</b>	<b>4.3</b>		0.57	0.26	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Barium</b>	<b>53</b>		0.57	0.10	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Beryllium</b>	<b>0.45</b>		0.23	0.049	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Boron</b>	<b>2.9</b>		2.8	0.40	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Cadmium</b>	<b>0.060</b>	<b>J</b>	0.11	0.033	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Calcium</b>	<b>2200</b>	<b>B</b>	11	3.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.57	0.098	mg/Kg	☼	12/02/16 09:27	12/03/16 22:12	1
<b>Cobalt</b>	<b>5.7</b>		0.28	0.064	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Copper</b>	<b>8.7</b>		0.57	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Iron</b>	<b>12000</b>	<b>B ^</b>	11	4.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Lead</b>	<b>5.6</b>		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Magnesium</b>	<b>1500</b>		5.7	2.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:23	1
<b>Manganese</b>	<b>480</b>		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: 500-120748-1

**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: 500-120748-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### GC/MS Semi VOA

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

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

## Glossary

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

# QC Association Summary

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

TestAmerica Job ID: 500-120748-1

## GC/MS VOA

### Prep Batch: 363131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	5035	
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	5035	
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	5035	
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	5035	
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	5035	
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	5035	

### Analysis Batch: 363336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	8260B	363131
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	8260B	363131
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	8260B	363131
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	8260B	363131
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	8260B	363131
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	8260B	363131
MB 500-363336/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-363336/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363336/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 363857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	3541	
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	3541	
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	3541	
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	3541	
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	3541	
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	3541	
MB 500-363857/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-363857/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 363926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	8270D	363857
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	8270D	363857
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	8270D	363857
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	8270D	363857
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	8270D	363857
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	8270D	363857
MB 500-363857/1-A	Method Blank	Total/NA	Solid	8270D	363857
LCS 500-363857/2-A	Lab Control Sample	Total/NA	Solid	8270D	363857

## GC Semi VOA

### Prep Batch: 363872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	3541	
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	3541	
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	3541	

TestAmerica Chicago

# QC Association Summary

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

TestAmerica Job ID: 500-120748-1

## GC Semi VOA (Continued)

### Prep Batch: 363872 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	3541	
MB 500-363872/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-363872/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-120748-6 MS	1314V3-21-B01 (5-10)	Total/NA	Solid	3541	
500-120748-6 MSD	1314V3-21-B01 (5-10)	Total/NA	Solid	3541	

### Analysis Batch: 363948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	8082A	363872
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	8082A	363872
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	8082A	363872
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	8082A	363872
MB 500-363872/1-A	Method Blank	Total/NA	Solid	8082A	363872
LCS 500-363872/2-A	Lab Control Sample	Total/NA	Solid	8082A	363872
500-120748-6 MS	1314V3-21-B01 (5-10)	Total/NA	Solid	8082A	363872
500-120748-6 MSD	1314V3-21-B01 (5-10)	Total/NA	Solid	8082A	363872

## Metals

### Prep Batch: 362981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	7471B	
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	7471B	
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	7471B	
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	7471B	
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	7471B	
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	7471B	
MB 500-362981/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-362981/13-A	Lab Control Sample	Total/NA	Solid	7471B	

### Leach Batch: 363172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	TCLP	Solid	1311	
500-120748-2	1314V3-75-B01 (0-2)	TCLP	Solid	1311	
500-120748-3	1314V3-21-B02 (0-6)	TCLP	Solid	1311	
500-120748-4	1314V3-21-B02 (0-6)D	TCLP	Solid	1311	
500-120748-5	1314V3-21-B01 (0-5)	TCLP	Solid	1311	
500-120748-6	1314V3-21-B01 (5-10)	TCLP	Solid	1311	
LB 500-363172/1-B	Method Blank	TCLP	Solid	1311	
LB 500-363172/1-C	Method Blank	TCLP	Solid	1311	
500-120748-6 MS	1314V3-21-B01 (5-10)	TCLP	Solid	1311	
500-120748-6 DU	1314V3-21-B01 (5-10)	TCLP	Solid	1311	

### Leach Batch: 363174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	SPLP East	Solid	1312	
500-120748-2	1314V3-75-B01 (0-2)	SPLP East	Solid	1312	
500-120748-3	1314V3-21-B02 (0-6)	SPLP East	Solid	1312	
500-120748-4	1314V3-21-B02 (0-6)D	SPLP East	Solid	1312	
500-120748-5	1314V3-21-B01 (0-5)	SPLP East	Solid	1312	

TestAmerica Chicago



# QC Association Summary

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

TestAmerica Job ID: 500-120748-1

## Metals (Continued)

### Leach Batch: 363174 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-363174/1-B	Method Blank	SPLP East	Solid	1312	

### Prep Batch: 363316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	3050B	
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	3050B	
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	3050B	
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	3050B	
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	3050B	
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	3050B	
MB 500-363316/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-363316/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-120748-1 MS	1314V3-74-B01 (0-2)	Total/NA	Solid	3050B	
500-120748-1 MSD	1314V3-74-B01 (0-2)	Total/NA	Solid	3050B	
500-120748-1 DU	1314V3-74-B01 (0-2)	Total/NA	Solid	3050B	

### Analysis Batch: 363327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	7471B	362981
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	7471B	362981
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	7471B	362981
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	7471B	362981
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	7471B	362981
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	7471B	362981
MB 500-362981/12-A	Method Blank	Total/NA	Solid	7471B	362981
LCS 500-362981/13-A	Lab Control Sample	Total/NA	Solid	7471B	362981

### Prep Batch: 363342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	TCLP	Solid	7470A	363172
500-120748-2	1314V3-75-B01 (0-2)	TCLP	Solid	7470A	363172
500-120748-3	1314V3-21-B02 (0-6)	TCLP	Solid	7470A	363172
500-120748-4	1314V3-21-B02 (0-6)D	TCLP	Solid	7470A	363172
500-120748-5	1314V3-21-B01 (0-5)	TCLP	Solid	7470A	363172
500-120748-6	1314V3-21-B01 (5-10)	TCLP	Solid	7470A	363172
LB 500-363172/1-B	Method Blank	TCLP	Solid	7470A	363172
MB 500-363342/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-363342/13-A	Lab Control Sample	Total/NA	Solid	7470A	

### Prep Batch: 363379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	TCLP	Solid	3010A	363172
500-120748-2	1314V3-75-B01 (0-2)	TCLP	Solid	3010A	363172
500-120748-3	1314V3-21-B02 (0-6)	TCLP	Solid	3010A	363172
500-120748-4	1314V3-21-B02 (0-6)D	TCLP	Solid	3010A	363172
500-120748-5	1314V3-21-B01 (0-5)	TCLP	Solid	3010A	363172
500-120748-6	1314V3-21-B01 (5-10)	TCLP	Solid	3010A	363172
LB 500-363172/1-C	Method Blank	TCLP	Solid	3010A	363172
LCS 500-363379/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-120748-6 MS	1314V3-21-B01 (5-10)	TCLP	Solid	3010A	363172
500-120748-6 DU	1314V3-21-B01 (5-10)	TCLP	Solid	3010A	363172

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# QC Association Summary

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

TestAmerica Job ID: 500-120748-1

## Prep Batch: 363388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	SPLP East	Solid	3010A	363174
500-120748-2	1314V3-75-B01 (0-2)	SPLP East	Solid	3010A	363174
500-120748-3	1314V3-21-B02 (0-6)	SPLP East	Solid	3010A	363174
500-120748-4	1314V3-21-B02 (0-6)D	SPLP East	Solid	3010A	363174
500-120748-5	1314V3-21-B01 (0-5)	SPLP East	Solid	3010A	363174
LB 500-363174/1-B	Method Blank	SPLP East	Solid	3010A	363174
LCS 500-363388/2-A	Lab Control Sample	Total/NA	Solid	3010A	

## Analysis Batch: 363473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	6010B	363316
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	6010B	363316
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	6010B	363316
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	6010B	363316
MB 500-363316/1-A	Method Blank	Total/NA	Solid	6010B	363316
LCS 500-363316/2-A	Lab Control Sample	Total/NA	Solid	6010B	363316
500-120748-1 MS	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-1 MSD	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-1 DU	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316

## Analysis Batch: 363546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	6010B	363316
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	6010B	363316
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	6010B	363316
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	6010B	363316
MB 500-363316/1-A	Method Blank	Total/NA	Solid	6010B	363316
LCS 500-363316/2-A	Lab Control Sample	Total/NA	Solid	6010B	363316
500-120748-1 MS	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-1 MSD	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316
500-120748-1 DU	1314V3-74-B01 (0-2)	Total/NA	Solid	6010B	363316

## Analysis Batch: 363547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	TCLP	Solid	6010B	363379
500-120748-2	1314V3-75-B01 (0-2)	TCLP	Solid	6010B	363379
500-120748-3	1314V3-21-B02 (0-6)	TCLP	Solid	6010B	363379
500-120748-4	1314V3-21-B02 (0-6)D	TCLP	Solid	6010B	363379
500-120748-5	1314V3-21-B01 (0-5)	TCLP	Solid	6010B	363379
500-120748-6	1314V3-21-B01 (5-10)	TCLP	Solid	6010B	363379
LB 500-363172/1-C	Method Blank	TCLP	Solid	6010B	363379
LCS 500-363379/2-A	Lab Control Sample	Total/NA	Solid	6010B	363379
500-120748-6 MS	1314V3-21-B01 (5-10)	TCLP	Solid	6010B	363379
500-120748-6 DU	1314V3-21-B01 (5-10)	TCLP	Solid	6010B	363379

## Analysis Batch: 363643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	TCLP	Solid	7470A	363342
500-120748-2	1314V3-75-B01 (0-2)	TCLP	Solid	7470A	363342

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# QC Association Summary

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

TestAmerica Job ID: 500-120748-1

## Metals (Continued)

### Analysis Batch: 363643 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-3	1314V3-21-B02 (0-6)	TCLP	Solid	7470A	363342
500-120748-4	1314V3-21-B02 (0-6)D	TCLP	Solid	7470A	363342
500-120748-5	1314V3-21-B01 (0-5)	TCLP	Solid	7470A	363342
500-120748-6	1314V3-21-B01 (5-10)	TCLP	Solid	7470A	363342
LB 500-363172/1-B	Method Blank	TCLP	Solid	7470A	363342
MB 500-363342/12-A	Method Blank	Total/NA	Solid	7470A	363342
LCS 500-363342/13-A	Lab Control Sample	Total/NA	Solid	7470A	363342

### Analysis Batch: 363685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	TCLP	Solid	6020A	363379
500-120748-2	1314V3-75-B01 (0-2)	TCLP	Solid	6020A	363379
500-120748-3	1314V3-21-B02 (0-6)	TCLP	Solid	6020A	363379
500-120748-4	1314V3-21-B02 (0-6)D	TCLP	Solid	6020A	363379
500-120748-5	1314V3-21-B01 (0-5)	TCLP	Solid	6020A	363379
500-120748-6	1314V3-21-B01 (5-10)	TCLP	Solid	6020A	363379
LB 500-363172/1-C	Method Blank	TCLP	Solid	6020A	363379
LCS 500-363379/2-A	Lab Control Sample	Total/NA	Solid	6020A	363379
500-120748-6 MS	1314V3-21-B01 (5-10)	TCLP	Solid	6020A	363379
500-120748-6 DU	1314V3-21-B01 (5-10)	TCLP	Solid	6020A	363379

### Analysis Batch: 363732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	SPLP East	Solid	6010B	363388
500-120748-2	1314V3-75-B01 (0-2)	SPLP East	Solid	6010B	363388
500-120748-3	1314V3-21-B02 (0-6)	SPLP East	Solid	6010B	363388
500-120748-4	1314V3-21-B02 (0-6)D	SPLP East	Solid	6010B	363388
500-120748-5	1314V3-21-B01 (0-5)	SPLP East	Solid	6010B	363388
LB 500-363174/1-B	Method Blank	SPLP East	Solid	6010B	363388
LCS 500-363388/2-A	Lab Control Sample	Total/NA	Solid	6010B	363388

### Analysis Batch: 363753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-3	1314V3-21-B02 (0-6)	SPLP East	Solid	6020A	363388
LB 500-363174/1-B	Method Blank	SPLP East	Solid	6020A	363388
LCS 500-363388/2-A	Lab Control Sample	Total/NA	Solid	6020A	363388

## General Chemistry

### Analysis Batch: 362966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	Moisture	
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	Moisture	
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	Moisture	
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	Moisture	
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	Moisture	
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	Moisture	

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# QC Association Summary

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

TestAmerica Job ID: 500-120748-1

## General Chemistry (Continued)

### Analysis Batch: 363480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120748-1	1314V3-74-B01 (0-2)	Total/NA	Solid	9045D	
500-120748-2	1314V3-75-B01 (0-2)	Total/NA	Solid	9045D	
500-120748-3	1314V3-21-B02 (0-6)	Total/NA	Solid	9045D	
500-120748-4	1314V3-21-B02 (0-6)D	Total/NA	Solid	9045D	
500-120748-5	1314V3-21-B01 (0-5)	Total/NA	Solid	9045D	
500-120748-6	1314V3-21-B01 (5-10)	Total/NA	Solid	9045D	
500-120748-1 DU	1314V3-74-B01 (0-2)	Total/NA	Solid	9045D	

# Surrogate Summary

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

TestAmerica Job ID: 500-120748-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (70-120)	DBFM (75-120)	12DCE (69-134)	TOL (75-123)
500-120748-1	1314V3-74-B01 (0-2)	128 X	98	101	108
500-120748-2	1314V3-75-B01 (0-2)	108	97	99	103
500-120748-3	1314V3-21-B02 (0-6)	107	96	100	104
500-120748-4	1314V3-21-B02 (0-6)D	109	95	101	102
500-120748-5	1314V3-21-B01 (0-5)	106	93	96	103
500-120748-6	1314V3-21-B01 (5-10)	106	96	99	101
LCS 500-363336/5	Lab Control Sample	103	93	90	103
LCSD 500-363336/6	Lab Control Sample Dup	101	97	94	103
MB 500-363336/7	Method Blank	102	92	87	101

### 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

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)
500-120748-1	1314V3-74-B01 (0-2)	99	95	85	79	55	89
500-120748-2	1314V3-75-B01 (0-2)	78	83	66	62	40	78
500-120748-3	1314V3-21-B02 (0-6)	101	103	84	80	74	93
500-120748-4	1314V3-21-B02 (0-6)D	83	84	71	68	53	78
500-120748-5	1314V3-21-B01 (0-5)	72	78	64	61	48	71
500-120748-6	1314V3-21-B01 (5-10)	85	86	71	65	28	83
LCS 500-363857/2-A	Lab Control Sample	101	102	87	83	66	89
MB 500-363857/1-A	Method Blank	103	96	89	84	53	94

### Surrogate Legend

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

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (41-124)	DCB1 (47-127)
500-120748-3	1314V3-21-B02 (0-6)	93	88
500-120748-4	1314V3-21-B02 (0-6)D	90	87
500-120748-5	1314V3-21-B01 (0-5)	123	98
500-120748-6	1314V3-21-B01 (5-10)	73	91
500-120748-6 MS	1314V3-21-B01 (5-10)	91	109

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# Surrogate Summary

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

TestAmerica Job ID: 500-120748-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (41-124)	DCB1 (47-127)
500-120748-6 MSD	1314V3-21-B01 (5-10)	81	92
LCS 500-363872/2-A	Lab Control Sample	88	89
MB 500-363872/1-A	Method Blank	94	95

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: MB 500-363336/7**

**Matrix: Solid**

**Analysis Batch: 363336**

**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			12/02/16 14:10	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/02/16 14:10	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/02/16 14:10	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/02/16 14:10	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/02/16 14:10	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/02/16 14:10	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/02/16 14:10	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/02/16 14:10	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/02/16 14:10	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/02/16 14:10	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/02/16 14:10	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/02/16 14:10	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/02/16 14:10	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/02/16 14:10	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/02/16 14:10	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/02/16 14:10	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/02/16 14:10	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/02/16 14:10	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/02/16 14:10	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/02/16 14:10	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/02/16 14:10	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/02/16 14:10	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/02/16 14:10	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/02/16 14:10	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/02/16 14:10	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/02/16 14:10	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/02/16 14:10	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/02/16 14:10	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/02/16 14:10	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/02/16 14:10	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/02/16 14:10	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/02/16 14:10	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/02/16 14:10	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/02/16 14:10	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/02/16 14:10	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/02/16 14:10	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/02/16 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120		12/02/16 14:10	1
Dibromofluoromethane	92		75 - 120		12/02/16 14:10	1
1,2-Dichloroethane-d4 (Surr)	87		69 - 134		12/02/16 14:10	1
Toluene-d8 (Surr)	101		75 - 123		12/02/16 14:10	1

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# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: LCS 500-363336/5**

**Matrix: Solid**

**Analysis Batch: 363336**

**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	0.0463		mg/Kg		93	40 - 148
Benzene	0.0500	0.0478		mg/Kg		96	70 - 120
Bromodichloromethane	0.0500	0.0488		mg/Kg		98	67 - 120
Bromoform	0.0500	0.0485		mg/Kg		97	50 - 129
Bromomethane	0.0500	0.0418		mg/Kg		84	50 - 134
2-Butanone (MEK)	0.0500	0.0445		mg/Kg		89	47 - 138
Carbon disulfide	0.0500	0.0503		mg/Kg		101	67 - 133
Carbon tetrachloride	0.0500	0.0487		mg/Kg		97	65 - 123
Chlorobenzene	0.0500	0.0488		mg/Kg		98	70 - 120
Chloroethane	0.0500	0.0622		mg/Kg		124	40 - 150
Chloroform	0.0500	0.0495		mg/Kg		99	70 - 120
Chloromethane	0.0500	0.0463		mg/Kg		93	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0485		mg/Kg		97	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0498		mg/Kg		100	70 - 120
Dibromochloromethane	0.0500	0.0491		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0485		mg/Kg		97	70 - 125
1,2-Dichloroethane	0.0500	0.0475		mg/Kg		95	65 - 126
1,1-Dichloroethene	0.0500	0.0506		mg/Kg		101	70 - 122
1,2-Dichloropropane	0.0500	0.0470		mg/Kg		94	70 - 126
Ethylbenzene	0.0500	0.0499		mg/Kg		100	70 - 120
2-Hexanone	0.0500	0.0431		mg/Kg		86	51 - 139
Methylene Chloride	0.0500	0.0506		mg/Kg		101	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0465		mg/Kg		93	51 - 141
Methyl tert-butyl ether	0.0500	0.0470		mg/Kg		94	70 - 121
Styrene	0.0500	0.0499		mg/Kg		100	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0492		mg/Kg		98	70 - 125
Tetrachloroethene	0.0500	0.0513		mg/Kg		103	70 - 122
Toluene	0.0500	0.0504		mg/Kg		101	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0499		mg/Kg		100	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0486		mg/Kg		97	70 - 121
1,1,1-Trichloroethane	0.0500	0.0492		mg/Kg		98	70 - 120
1,1,2-Trichloroethane	0.0500	0.0478		mg/Kg		96	70 - 120
Trichloroethene	0.0500	0.0493		mg/Kg		99	70 - 124
Vinyl acetate	0.0500	0.0441		mg/Kg		88	40 - 150
Vinyl chloride	0.0500	0.0472		mg/Kg		94	64 - 125
Xylenes, Total	0.100	0.101		mg/Kg		101	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 120
Dibromofluoromethane	93		75 - 120
1,2-Dichloroethane-d4 (Surr)	90		69 - 134
Toluene-d8 (Surr)	103		75 - 123



# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: LCSD 500-363336/6**

**Matrix: Solid**

**Analysis Batch: 363336**

**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	0.0439		mg/Kg		88	40 - 148	5	30
Benzene	0.0500	0.0522		mg/Kg		104	70 - 120	9	30
Bromodichloromethane	0.0500	0.0531		mg/Kg		106	67 - 120	8	30
Bromoform	0.0500	0.0550		mg/Kg		110	50 - 129	12	30
Bromomethane	0.0500	0.0479		mg/Kg		96	50 - 134	13	30
2-Butanone (MEK)	0.0500	0.0449		mg/Kg		90	47 - 138	1	30
Carbon disulfide	0.0500	0.0542		mg/Kg		108	67 - 133	8	30
Carbon tetrachloride	0.0500	0.0528		mg/Kg		106	65 - 123	8	30
Chlorobenzene	0.0500	0.0530		mg/Kg		106	70 - 120	8	30
Chloroethane	0.0500	0.0553		mg/Kg		111	40 - 150	12	30
Chloroform	0.0500	0.0542		mg/Kg		108	70 - 120	9	30
Chloromethane	0.0500	0.0502		mg/Kg		100	63 - 135	8	30
cis-1,2-Dichloroethene	0.0500	0.0533		mg/Kg		107	70 - 120	9	30
cis-1,3-Dichloropropene	0.0500	0.0542		mg/Kg		108	70 - 120	8	30
Dibromochloromethane	0.0500	0.0550		mg/Kg		110	68 - 120	11	30
1,1-Dichloroethane	0.0500	0.0526		mg/Kg		105	70 - 125	8	30
1,2-Dichloroethane	0.0500	0.0528		mg/Kg		106	65 - 126	11	30
1,1-Dichloroethene	0.0500	0.0546		mg/Kg		109	70 - 122	8	30
1,2-Dichloropropane	0.0500	0.0521		mg/Kg		104	70 - 126	10	30
Ethylbenzene	0.0500	0.0533		mg/Kg		107	70 - 120	6	30
2-Hexanone	0.0500	0.0476		mg/Kg		95	51 - 139	10	30
Methylene Chloride	0.0500	0.0562		mg/Kg		112	70 - 121	10	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0489		mg/Kg		98	51 - 141	5	30
Methyl tert-butyl ether	0.0500	0.0546		mg/Kg		109	70 - 121	15	30
Styrene	0.0500	0.0540		mg/Kg		108	70 - 121	8	30
1,1,1,2-Tetrachloroethane	0.0500	0.0555		mg/Kg		111	70 - 125	12	30
Tetrachloroethene	0.0500	0.0549		mg/Kg		110	70 - 122	7	30
Toluene	0.0500	0.0530		mg/Kg		106	70 - 121	5	30
trans-1,2-Dichloroethene	0.0500	0.0540		mg/Kg		108	70 - 120	8	30
trans-1,3-Dichloropropene	0.0500	0.0523		mg/Kg		105	70 - 121	7	30
1,1,1-Trichloroethane	0.0500	0.0528		mg/Kg		106	70 - 120	7	30
1,1,2-Trichloroethane	0.0500	0.0538		mg/Kg		108	70 - 120	12	30
Trichloroethene	0.0500	0.0525		mg/Kg		105	70 - 124	6	30
Vinyl acetate	0.0500	0.0498		mg/Kg		100	40 - 150	12	30
Vinyl chloride	0.0500	0.0516		mg/Kg		103	64 - 125	9	30
Xylenes, Total	0.100	0.110		mg/Kg		110	70 - 123	9	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane	97		75 - 120
1,2-Dichloroethane-d4 (Surr)	94		69 - 134
Toluene-d8 (Surr)	103		75 - 123

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: MB 500-363857/1-A**

**Matrix: Solid**

**Analysis Batch: 363926**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 363857**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/06/16 16:39	12/07/16 10:56	1

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# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: MB 500-363857/1-A**  
**Matrix: Solid**  
**Analysis Batch: 363926**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363857**

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		12/06/16 16:39	12/07/16 10:56	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/06/16 16:39	12/07/16 10:56	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/06/16 16:39	12/07/16 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/06/16 16:39	12/07/16 10:56	1
Phenol-d5	96		36 - 123	12/06/16 16:39	12/07/16 10:56	1
Nitrobenzene-d5	89		33 - 124	12/06/16 16:39	12/07/16 10:56	1
2-Fluorobiphenyl	84		42 - 115	12/06/16 16:39	12/07/16 10:56	1
2,4,6-Tribromophenol	53		25 - 130	12/06/16 16:39	12/07/16 10:56	1
Terphenyl-d14	94		25 - 150	12/06/16 16:39	12/07/16 10:56	1

**Lab Sample ID: LCS 500-363857/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363926**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363857**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.47		mg/Kg		110	55 - 118
Bis(2-chloroethyl)ether	1.33	1.28		mg/Kg		96	53 - 116
1,3-Dichlorobenzene	1.33	1.10		mg/Kg		83	56 - 110
1,4-Dichlorobenzene	1.33	1.14		mg/Kg		86	57 - 110
1,2-Dichlorobenzene	1.33	1.12		mg/Kg		84	56 - 110
2-Methylphenol	1.33	1.15		mg/Kg		87	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.54		mg/Kg		115	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.36		mg/Kg		102	56 - 119
Hexachloroethane	1.33	1.18		mg/Kg		88	54 - 111
2-Chlorophenol	1.33	1.23		mg/Kg		92	57 - 117
Nitrobenzene	1.33	1.35		mg/Kg		101	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.27		mg/Kg		95	59 - 116
1,2,4-Trichlorobenzene	1.33	1.08		mg/Kg		81	60 - 116
Isophorone	1.33	1.13		mg/Kg		84	54 - 120
2,4-Dimethylphenol	1.33	1.15		mg/Kg		87	50 - 120
Hexachlorobutadiene	1.33	0.959		mg/Kg		72	56 - 120
Naphthalene	1.33	1.29		mg/Kg		97	58 - 116
2,4-Dichlorophenol	1.33	1.07		mg/Kg		80	61 - 116

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: LCS 500-363857/2-A**

**Matrix: Solid**

**Analysis Batch: 363926**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 363857**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.74		mg/Kg		131	10 - 150
2,4,6-Trichlorophenol	1.33	0.978		mg/Kg		73	50 - 120
2,4,5-Trichlorophenol	1.33	1.05		mg/Kg		79	42 - 119
Hexachlorocyclopentadiene	1.33	0.378	J	mg/Kg		28	10 - 116
2-Methylnaphthalene	1.33	1.10		mg/Kg		82	55 - 120
2-Nitroaniline	1.33	1.44		mg/Kg		108	52 - 121
2-Chloronaphthalene	1.33	1.20		mg/Kg		90	57 - 112
4-Chloro-3-methylphenol	1.33	1.20		mg/Kg		90	59 - 117
2,6-Dinitrotoluene	1.33	1.19		mg/Kg		90	57 - 118
2-Nitrophenol	1.33	1.20		mg/Kg		90	58 - 121
3-Nitroaniline	1.33	1.23		mg/Kg		92	20 - 144
Dimethyl phthalate	1.33	1.13		mg/Kg		85	60 - 112
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		20	10 - 110
Acenaphthylene	1.33	1.17		mg/Kg		88	57 - 116
2,4-Dinitrotoluene	1.33	1.14		mg/Kg		86	59 - 119
Acenaphthene	1.33	1.08		mg/Kg		81	52 - 113
Dibenzofuran	1.33	1.17		mg/Kg		88	59 - 110
4-Nitrophenol	2.67	1.96		mg/Kg		74	32 - 123
Fluorene	1.33	1.18		mg/Kg		88	56 - 115
4-Nitroaniline	1.33	1.78		mg/Kg		133	55 - 146
4-Bromophenyl phenyl ether	1.33	1.08		mg/Kg		81	61 - 124
Hexachlorobenzene	1.33	1.05		mg/Kg		79	62 - 126
Diethyl phthalate	1.33	1.15		mg/Kg		87	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.11		mg/Kg		84	61 - 111
Pentachlorophenol	2.67	0.924		mg/Kg		35	12 - 116
N-Nitrosodiphenylamine	1.33	1.25		mg/Kg		94	62 - 117
4,6-Dinitro-2-methylphenol	2.67	1.03		mg/Kg		39	10 - 110
Phenanthrene	1.33	1.19		mg/Kg		89	58 - 125
Anthracene	1.33	1.19		mg/Kg		89	57 - 118
Carbazole	1.33	1.85	*	mg/Kg		139	65 - 137
Di-n-butyl phthalate	1.33	1.27		mg/Kg		96	61 - 123
Fluoranthene	1.33	1.13		mg/Kg		85	61 - 124
Pyrene	1.33	1.20		mg/Kg		90	60 - 115
Butyl benzyl phthalate	1.33	1.36		mg/Kg		102	61 - 115
Benzo[a]anthracene	1.33	1.19		mg/Kg		89	63 - 115
Chrysene	1.33	1.16		mg/Kg		87	63 - 118
3,3'-Dichlorobenzidine	1.33	1.10		mg/Kg		83	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.46		mg/Kg		110	62 - 117
Di-n-octyl phthalate	1.33	1.33		mg/Kg		100	58 - 129
Benzo[b]fluoranthene	1.33	1.15		mg/Kg		86	61 - 123
Benzo[k]fluoranthene	1.33	1.23		mg/Kg		92	59 - 125
Benzo[a]pyrene	1.33	1.18		mg/Kg		88	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.19		mg/Kg		90	50 - 149
Dibenz(a,h)anthracene	1.33	1.19		mg/Kg		89	61 - 134
Benzo[g,h,i]perylene	1.33	1.25		mg/Kg		94	55 - 134
3 & 4 Methylphenol	1.33	1.30		mg/Kg		98	55 - 124

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: LCS 500-363857/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363926**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363857**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	101		40 - 130
Phenol-d5	102		36 - 123
Nitrobenzene-d5	87		33 - 124
2-Fluorobiphenyl	83		42 - 115
2,4,6-Tribromophenol	66		25 - 130
Terphenyl-d14	89		25 - 150

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-363872/1-A**  
**Matrix: Solid**  
**Analysis Batch: 363948**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363872**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.017		0.017	0.0059	mg/Kg		12/06/16 19:00	12/07/16 09:27	1
PCB-1221	<0.017		0.017	0.0073	mg/Kg		12/06/16 19:00	12/07/16 09:27	1
PCB-1232	<0.017		0.017	0.0073	mg/Kg		12/06/16 19:00	12/07/16 09:27	1
PCB-1242	<0.017		0.017	0.0055	mg/Kg		12/06/16 19:00	12/07/16 09:27	1
PCB-1248	<0.017		0.017	0.0066	mg/Kg		12/06/16 19:00	12/07/16 09:27	1
PCB-1254	<0.017		0.017	0.0036	mg/Kg		12/06/16 19:00	12/07/16 09:27	1
PCB-1260	<0.017		0.017	0.0082	mg/Kg		12/06/16 19:00	12/07/16 09:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		41 - 124	12/06/16 19:00	12/07/16 09:27	1
DCB Decachlorobiphenyl	95		47 - 127	12/06/16 19:00	12/07/16 09:27	1

**Lab Sample ID: LCS 500-363872/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363948**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363872**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	0.167	0.144		mg/Kg		86	60 - 118
PCB-1260	0.167	0.153		mg/Kg		92	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	88		41 - 124
DCB Decachlorobiphenyl	89		47 - 127

**Lab Sample ID: 500-120748-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 363948**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 363872**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
PCB-1016	<0.019		0.189	0.193		mg/Kg	☼	102	60 - 118
PCB-1260	0.012	J	0.189	0.217		mg/Kg	☼	109	66 - 125

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: 500-120748-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 363948**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 363872**

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	91		41 - 124
DCB Decachlorobiphenyl	109		47 - 127

**Lab Sample ID: 500-120748-6 MSD**  
**Matrix: Solid**  
**Analysis Batch: 363948**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 363872**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
	Result	Qualifier		Result	Qualifier								
PCB-1016	<0.019		0.189	0.167		mg/Kg	☼	88	60 - 118	14		30	
PCB-1260	0.012	J	0.189	0.185		mg/Kg	☼	91	66 - 125	16		30	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	81		41 - 124
DCB Decachlorobiphenyl	92		47 - 127

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-363316/1-A**  
**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.42	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Barium	<1.0		1.0	0.18	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Boron	<5.0		5.0	0.70	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Calcium	7.21	J	20	6.4	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Copper	<1.0		1.0	0.22	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Iron	8.21	J	20	7.7	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Lead	<0.50		0.50	0.25	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Magnesium	<10		10	4.1	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Nickel	0.360	J	1.0	0.27	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Potassium	<50		50	8.2	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Silver	<0.50		0.50	0.12	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Sodium	<100		100	13	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/02/16 09:27	12/02/16 21:53	1

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# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: MB 500-363316/1-A**  
**Matrix: Solid**  
**Analysis Batch: 363546**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.800	J	1.0	0.17	mg/Kg		12/02/16 09:27	12/03/16 21:17	1

**Lab Sample ID: LCS 500-363316/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	45.5		mg/Kg		91	80 - 120
Arsenic	10.0	9.38		mg/Kg		94	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Beryllium	5.00	4.94		mg/Kg		99	80 - 120
Boron	100	91.9		mg/Kg		92	80 - 120
Cadmium	5.00	4.75		mg/Kg		95	80 - 120
Calcium	1000	978		mg/Kg		98	80 - 120
Cobalt	50.0	47.8		mg/Kg		96	80 - 120
Copper	25.0	24.4		mg/Kg		98	80 - 120
Iron	100	107		mg/Kg		107	80 - 120
Lead	10.0	9.76		mg/Kg		98	80 - 120
Magnesium	1000	961		mg/Kg		96	80 - 120
Manganese	50.0	50.6		mg/Kg		101	80 - 120
Nickel	50.0	48.0		mg/Kg		96	80 - 120
Potassium	1000	938		mg/Kg		94	80 - 120
Selenium	10.0	8.91		mg/Kg		89	80 - 120
Silver	5.00	4.75		mg/Kg		95	80 - 120
Sodium	1000	951		mg/Kg		95	80 - 120
Thallium	10.0	9.44		mg/Kg		94	80 - 120
Vanadium	50.0	49.8		mg/Kg		100	80 - 120
Zinc	50.0	47.7		mg/Kg		95	80 - 120

**Lab Sample ID: LCS 500-363316/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363546**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chromium	20.0	19.9		mg/Kg		99	80 - 120

**Lab Sample ID: 500-120748-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: 1314V3-74-B01 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.73	J F1	27.4	4.87	F1	mg/Kg	☼	15	75 - 125
Arsenic	3.7		5.49	8.11		mg/Kg	☼	81	75 - 125
Barium	43	F1	110	120	F1	mg/Kg	☼	70	75 - 125
Beryllium	0.45	F1	2.74	2.48	F1	mg/Kg	☼	74	75 - 125
Boron	5.0	F1	54.9	41.1	F1	mg/Kg	☼	66	75 - 125
Cadmium	0.24	F1	2.74	2.02	F1	mg/Kg	☼	65	75 - 125
Calcium	48000	B	549	38900	4	mg/Kg	☼	-1578	75 - 125
Cobalt	5.6	F1	27.4	23.2	F1	mg/Kg	☼	64	75 - 125

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# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: 500-120748-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: 1314V3-74-B01 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**  
**%Rec.**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Copper	12		13.7	22.2		mg/Kg	☼	75	75 - 125
Iron	13000	B ^	54.9	12300	4	mg/Kg	☼	-641	75 - 125
Lead	9.0		5.49	14.0		mg/Kg	☼	91	75 - 125
Magnesium	24000		549	19600	4	mg/Kg	☼	-746	75 - 125
Manganese	330		27.4	328	4	mg/Kg	☼	9	75 - 125
Nickel	13	F1 B	27.4	30.3	F1	mg/Kg	☼	64	75 - 125
Potassium	1400	F1	549	2290	F1	mg/Kg	☼	170	75 - 125
Selenium	0.31	J F1	5.49	3.79	F1	mg/Kg	☼	63	75 - 125
Silver	<0.26		2.74	2.09		mg/Kg	☼	76	75 - 125
Sodium	640		549	1100		mg/Kg	☼	84	75 - 125
Thallium	0.98	F1	5.49	4.66	F1	mg/Kg	☼	67	75 - 125
Vanadium	16		27.4	40.9		mg/Kg	☼	90	75 - 125
Zinc	34	F1	27.4	47.1	F1	mg/Kg	☼	49	75 - 125

**Lab Sample ID: 500-120748-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363546**

**Client Sample ID: 1314V3-74-B01 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**  
**%Rec.**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Chromium	10	B F1	11.0	17.6	F1	mg/Kg	☼	68	75 - 125

**Lab Sample ID: 500-120748-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: 1314V3-74-B01 (0-2)**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**  
**%Rec.**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Antimony	0.73	J F1	25.9	5.30	F1	mg/Kg	☼	18	75 - 125	9	20
Arsenic	3.7		5.18	8.78		mg/Kg	☼	99	75 - 125	8	20
Barium	43	F1	104	137		mg/Kg	☼	91	75 - 125	13	20
Beryllium	0.45	F1	2.59	2.79		mg/Kg	☼	90	75 - 125	12	20
Boron	5.0	F1	51.8	44.8		mg/Kg	☼	77	75 - 125	9	20
Cadmium	0.24	F1	2.59	2.22		mg/Kg	☼	76	75 - 125	9	20
Calcium	48000	B	518	45000	4	mg/Kg	☼	-508	75 - 125	14	20
Cobalt	5.6	F1	25.9	25.6		mg/Kg	☼	77	75 - 125	10	20
Copper	12		12.9	24.1		mg/Kg	☼	94	75 - 125	8	20
Iron	13000	B ^	51.8	14400	4	mg/Kg	☼	3431	75 - 125	16	20
Lead	9.0		5.18	14.2		mg/Kg	☼	100	75 - 125	2	20
Magnesium	24000		518	22700	4	mg/Kg	☼	-183	75 - 125	15	20
Manganese	330		25.9	337	4	mg/Kg	☼	44	75 - 125	3	20
Nickel	13	F1 B	25.9	33.4		mg/Kg	☼	80	75 - 125	10	20
Potassium	1400	F1	518	2560	F1	mg/Kg	☼	233	75 - 125	11	20
Selenium	0.31	J F1	5.18	4.20		mg/Kg	☼	75	75 - 125	10	20
Silver	<0.26		2.59	2.40		mg/Kg	☼	93	75 - 125	14	20
Sodium	640		518	1230		mg/Kg	☼	115	75 - 125	12	20
Thallium	0.98	F1	5.18	5.17		mg/Kg	☼	81	75 - 125	10	20
Vanadium	16		25.9	45.0		mg/Kg	☼	111	75 - 125	10	20
Zinc	34	F1	25.9	49.8	F1	mg/Kg	☼	62	75 - 125	6	20

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# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: 500-120748-1 MSD**

**Matrix: Solid**  
**Analysis Batch: 363546**

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Chromium	10	B F1	10.4	21.1		mg/Kg	☼	107	75 - 125	18	20

**Lab Sample ID: 500-120748-1 DU**

**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	0.73	J F1	0.347	J F5	mg/Kg	☼	71	20
Arsenic	3.7		3.65		mg/Kg	☼	0.3	20
Barium	43	F1	38.0		mg/Kg	☼	12	20
Beryllium	0.45	F1	0.485		mg/Kg	☼	7	20
Boron	5.0	F1	5.88		mg/Kg	☼	17	20
Cadmium	0.24	F1	0.256		mg/Kg	☼	5	20
Calcium	48000	B	44300		mg/Kg	☼	7	20
Cobalt	5.6	F1	5.59		mg/Kg	☼	0.5	20
Copper	12		12.6		mg/Kg	☼	6	20
Iron	13000	B ^	13000		mg/Kg	☼	3	20
Lead	9.0		10.7		mg/Kg	☼	17	20
Magnesium	24000		21000		mg/Kg	☼	12	20
Manganese	330		340		mg/Kg	☼	4	20
Nickel	13	F1 B	13.2		mg/Kg	☼	4	20
Potassium	1400	F1	1460		mg/Kg	☼	8	20
Selenium	0.31	J F1	0.312	J	mg/Kg	☼	1	20
Silver	<0.26		<0.28		mg/Kg	☼	NC	20
Sodium	640		645		mg/Kg	☼	1	20
Thallium	0.98	F1	0.887		mg/Kg	☼	10	20
Vanadium	16		17.4		mg/Kg	☼	7	20
Zinc	34	F1	29.8		mg/Kg	☼	12	20

**Lab Sample ID: 500-120748-1 DU**

**Matrix: Solid**  
**Analysis Batch: 363546**

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chromium	10	B F1	11.1		mg/Kg	☼	10	20

**Lab Sample ID: LCS 500-363379/2-A**

**Matrix: Solid**  
**Analysis Batch: 363547**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**  
**Prep Batch: 363379**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.487	J	mg/L		97	80 - 120
Beryllium	0.0500	0.0487		mg/L		97	80 - 120
Boron	1.00	0.891		mg/L		89	80 - 120
Cadmium	0.0500	0.0467		mg/L		93	80 - 120
Chromium	0.200	0.189		mg/L		94	80 - 120
Cobalt	0.500	0.486		mg/L		97	80 - 120
Iron	1.00	1.04		mg/L		104	80 - 120
Lead	0.100	0.0906		mg/L		91	80 - 120

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# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: LCS 500-363379/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363547**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363379**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.482		mg/L		96	80 - 120
Nickel	0.500	0.474		mg/L		95	80 - 120
Selenium	0.100	0.0921		mg/L		92	80 - 120
Silver	0.0500	0.0468		mg/L		94	80 - 120
Zinc	0.500	0.461	J	mg/L		92	80 - 120

**Lab Sample ID: LCS 500-363388/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363388**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.0981		mg/L		98	80 - 120
Manganese	0.500	0.517		mg/L		103	80 - 120

**Lab Sample ID: LB 500-363172/1-C**  
**Matrix: Solid**  
**Analysis Batch: 363547**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363379**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/02/16 14:06	12/03/16 20:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/02/16 14:06	12/03/16 20:58	1
Boron	0.0659	J	0.50	0.050	mg/L		12/02/16 14:06	12/03/16 20:58	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/02/16 14:06	12/03/16 20:58	1
Chromium	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 20:58	1
Cobalt	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 20:58	1
Iron	<0.40		0.40	0.20	mg/L		12/02/16 14:06	12/03/16 20:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/02/16 14:06	12/03/16 20:58	1
Manganese	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 20:58	1
Nickel	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 20:58	1
Selenium	<0.050		0.050	0.020	mg/L		12/02/16 14:06	12/03/16 20:58	1
Silver	<0.025		0.025	0.010	mg/L		12/02/16 14:06	12/03/16 20:58	1
Zinc	<0.50		0.50	0.020	mg/L		12/02/16 14:06	12/03/16 20:58	1

**Lab Sample ID: 500-120748-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 363547**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: TCLP**  
**Prep Batch: 363379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	0.24	J	0.500	0.751		mg/L		102	50 - 150
Beryllium	<0.0040		0.0500	0.0516		mg/L		103	50 - 150
Boron	0.066	J B	1.00	0.972		mg/L		91	50 - 150
Cadmium	<0.0050		0.0500	0.0539		mg/L		108	50 - 150
Chromium	<0.025		0.200	0.194		mg/L		97	50 - 150
Cobalt	<0.025		0.500	0.526		mg/L		105	50 - 150
Iron	<0.40		1.00	1.13		mg/L		113	50 - 150
Lead	<0.0075		0.100	0.0937		mg/L		94	50 - 150
Manganese	<0.025		0.500	0.488		mg/L		98	50 - 150
Nickel	<0.025		0.500	0.509		mg/L		102	50 - 150
Selenium	<0.050		0.100	0.115		mg/L		115	50 - 150

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

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

**Lab Sample ID: 500-120748-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 363547**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: TCLP**  
**Prep Batch: 363379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<0.025		0.0500	0.0570		mg/L		114	50 - 150
Zinc	<0.50		0.500	0.552		mg/L		110	50 - 150

**Lab Sample ID: 500-120748-6 DU**  
**Matrix: Solid**  
**Analysis Batch: 363547**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: TCLP**  
**Prep Batch: 363379**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Barium	0.24	J	0.250	J	mg/L		3	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.066	J B	0.0673	J	mg/L		2	20
Cadmium	<0.0050		<0.0050		mg/L		NC	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	<0.025		<0.025		mg/L		NC	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

**Lab Sample ID: LB 500-363174/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 363388**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/02/16 14:10	12/05/16 20:11	1
Manganese	<0.025		0.025	0.010	mg/L		12/02/16 14:10	12/05/16 20:11	1

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

**Lab Sample ID: LCS 500-363379/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363685**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363379**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.440		mg/L		88	80 - 120
Thallium	0.100	0.0917		mg/L		92	80 - 120

**Lab Sample ID: LCS 500-363388/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363753**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363388**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.436		mg/L		87	80 - 120

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: LB 500-363172/1-C**  
**Matrix: Solid**  
**Analysis Batch: 363685**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363379**

Analyte	LB Result	LB 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 11:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/02/16 14:06	12/05/16 11:18	1

**Lab Sample ID: 500-120748-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 363685**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: TCLP**  
**Prep Batch: 363379**

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	0.0917		mg/L		92	50 - 150

**Lab Sample ID: 500-120748-6 DU**  
**Matrix: Solid**  
**Analysis Batch: 363685**

**Client Sample ID: 1314V3-21-B01 (5-10)**  
**Prep Type: TCLP**  
**Prep Batch: 363379**

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

**Lab Sample ID: LB 500-363174/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363753**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 363388**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/02/16 14:10	12/05/16 17:08	1

## Method: 7470A - TCLP Mercury

**Lab Sample ID: MB 500-363342/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363643**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363342**

Analyte	MB Result	MB 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 11:43	1

**Lab Sample ID: LCS 500-363342/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363643**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363342**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00180		mg/L		90	80 - 120

**Lab Sample ID: LB 500-363172/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363643**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363342**

Analyte	LB Result	LB 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 11:49	1

TestAmerica Chicago

# QC Sample Results

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

TestAmerica Job ID: 500-120748-1

## Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-362981/12-A  
 Matrix: Solid  
 Analysis Batch: 363327

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 362981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg		11/30/16 14:45	12/02/16 09:10	1

Lab Sample ID: LCS 500-362981/13-A  
 Matrix: Solid  
 Analysis Batch: 363327

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 362981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.165		mg/Kg		99	80 - 120

## Method: 9045D - pH

Lab Sample ID: 500-120748-1 DU  
 Matrix: Solid  
 Analysis Batch: 363480

Client Sample ID: 1314V3-74-B01 (0-2)  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	9.0		9.0		SU		0.2	

# Lab Chronicle

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Lab Sample ID: 500-120748-1**

**Date Collected: 11/29/16 09:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363174	12/01/16 13:05	RMP	TAL CHI
SPLP East	Prep	3010A			363388	12/02/16 14:10	JNH	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 21:55	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6010B		1	363547	12/03/16 22:24	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 12:20	FXG	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	7470A			363342	12/02/16 10:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363643	12/05/16 12:16	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 17:07		
					(End)	12/02/16 17:14		
Total/NA	Analysis	Moisture		1	362966	11/30/16 13:50	LWN	TAL CHI

**Client Sample ID: 1314V3-74-B01 (0-2)**

**Lab Sample ID: 500-120748-1**

**Date Collected: 11/29/16 09:55**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 89.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363131	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 19:55	BDW	TAL CHI
Total/NA	Prep	3541			363857	12/06/16 16:39	JP1	TAL CHI
Total/NA	Analysis	8270D		1	363926	12/07/16 12:48	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/02/16 22:06	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 21:26	PJ1	TAL CHI
Total/NA	Prep	7471B			362981	11/30/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363327	12/02/16 09:28	MJD	TAL CHI

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

**Date Collected: 11/29/16 10:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363174	12/01/16 13:05	RMP	TAL CHI
SPLP East	Prep	3010A			363388	12/02/16 14:10	JNH	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 22:02	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6010B		1	363547	12/03/16 22:29	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

**Date Collected: 11/29/16 10:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 12:23	FXG	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	7470A			363342	12/02/16 10:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363643	12/05/16 12:17	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 17:21 (End) 12/02/16 17:29	JB	TAL CHI
Total/NA	Analysis	Moisture		1	362966	11/30/16 13:50	LWN	TAL CHI

**Client Sample ID: 1314V3-75-B01 (0-2)**

**Lab Sample ID: 500-120748-2**

**Date Collected: 11/29/16 10:05**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 82.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363131	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 20:20	BDW	TAL CHI
Total/NA	Prep	3541			363857	12/06/16 16:39	JP1	TAL CHI
Total/NA	Analysis	8270D		1	363926	12/07/16 13:16	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/02/16 22:40	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 21:48	PJ1	TAL CHI
Total/NA	Prep	7471B			362981	11/30/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363327	12/02/16 09:29	MJD	TAL CHI

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363174	12/01/16 13:05	RMP	TAL CHI
SPLP East	Prep	3010A			363388	12/02/16 14:10	JNH	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 22:09	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6010B		1	363547	12/03/16 22:34	PJ1	TAL CHI
SPLP East	Leach	1312			363174	12/01/16 13:05	RMP	TAL CHI
SPLP East	Prep	3010A			363388	12/02/16 14:10	JNH	TAL CHI
SPLP East	Analysis	6020A		1	363753	12/05/16 17:22	FXG	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 12:27	FXG	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	7470A			363342	12/02/16 10:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363643	12/05/16 12:19	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBJ	TAL CHI
					(Start)	12/02/16 17:29		
					(End)	12/02/16 17:36		
Total/NA	Analysis	Moisture		1	362966	11/30/16 13:50	LWN	TAL CHI

**Client Sample ID: 1314V3-21-B02 (0-6)**

**Lab Sample ID: 500-120748-3**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 75.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363131	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 20:45	BDW	TAL CHI
Total/NA	Prep	3541			363857	12/06/16 16:39	JP1	TAL CHI
Total/NA	Analysis	8270D		1	363926	12/07/16 14:12	AJD	TAL CHI
Total/NA	Prep	3541			363872	12/06/16 19:00	LLH	TAL CHI
Total/NA	Analysis	8082A		1	363948	12/07/16 13:00	BJH	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		5	363473	12/02/16 23:03	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		5	363546	12/03/16 21:53	PJ1	TAL CHI
Total/NA	Prep	7471B			362981	11/30/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363327	12/02/16 09:31	MJD	TAL CHI

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363174	12/01/16 13:05	RMP	TAL CHI
SPLP East	Prep	3010A			363388	12/02/16 14:10	JNH	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 22:31	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6010B		1	363547	12/03/16 22:39	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 12:30	FXG	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	7470A			363342	12/02/16 10:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363643	12/05/16 12:20	MJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

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

TestAmerica Job ID: 500-120748-1

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	363480	12/02/16 17:36 (Start) 12/02/16 17:43 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	362966	11/30/16 13:50	LWN	TAL CHI

**Client Sample ID: 1314V3-21-B02 (0-6)D**

**Lab Sample ID: 500-120748-4**

**Date Collected: 11/29/16 11:45**

**Matrix: Solid**

**Date Received: 11/30/16 10:20**

**Percent Solids: 79.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363131	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 21:09	BDW	TAL CHI
Total/NA	Prep	3541			363857	12/06/16 16:39	JP1	TAL CHI
Total/NA	Analysis	8270D		1	363926	12/07/16 14:40	AJD	TAL CHI
Total/NA	Prep	3541			363872	12/06/16 19:00	LLH	TAL CHI
Total/NA	Analysis	8082A		1	363948	12/07/16 13:15	BJH	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		5	363473	12/02/16 23:10	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		5	363546	12/03/16 21:57	PJ1	TAL CHI
Total/NA	Prep	7471B			362981	11/30/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363327	12/02/16 09:32	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363174	12/01/16 13:05	RMP	TAL CHI
SPLP East	Prep	3010A			363388	12/02/16 14:10	JNH	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/05/16 22:38	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6010B		1	363547	12/03/16 22:43	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 12:41	FXG	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	7470A			363342	12/02/16 10:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363643	12/05/16 12:25	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	12/02/16 17:43 (Start) 12/02/16 17:50 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	362966	11/30/16 13:50	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120748-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363131	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 21:34	BDW	TAL CHI
Total/NA	Prep	3541			363857	12/06/16 16:39	JP1	TAL CHI
Total/NA	Analysis	8270D		1	363926	12/07/16 13:44	AJD	TAL CHI
Total/NA	Prep	3541			363872	12/06/16 19:00	LLH	TAL CHI
Total/NA	Analysis	8082A		1	363948	12/07/16 13:31	BJH	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		5	363473	12/02/16 23:16	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		5	363546	12/03/16 22:08	PJ1	TAL CHI
Total/NA	Prep	7471B			362981	11/30/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363327	12/02/16 09:34	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6010B		1	363547	12/03/16 22:48	PJ1	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	3010A			363379	12/02/16 14:06	JNH	TAL CHI
TCLP	Analysis	6020A		1	363685	12/05/16 12:44	FXG	TAL CHI
TCLP	Leach	1311			363172	12/01/16 13:05	RMP	TAL CHI
TCLP	Prep	7470A			363342	12/02/16 10:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363643	12/05/16 12:26	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 17:50		
					(End)	12/02/16 17:57		
Total/NA	Analysis	Moisture		1	362966	11/30/16 13:50	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363131	11/30/16 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 21:58	BDW	TAL CHI
Total/NA	Prep	3541			363857	12/06/16 16:39	JP1	TAL CHI
Total/NA	Analysis	8270D		1	363926	12/07/16 11:24	AJD	TAL CHI
Total/NA	Prep	3541			363872	12/06/16 19:00	LLH	TAL CHI
Total/NA	Analysis	8082A		1	363948	12/07/16 10:43	BJH	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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

TestAmerica Job ID: 500-120748-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	363473	12/02/16 23:23	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:12	PJ1	TAL CHI
Total/NA	Prep	7471B			362981	11/30/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363327	12/02/16 09:35	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: 500-120748-1

## Laboratory: TestAmerica Chicago

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

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

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

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

# TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 61  
Phone: 708.534.5200 Fax: 708.534



500-120748 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 #: 500-120748  
Chain of Custody Number: EE86-04  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: 39.30

Client		Client Project #		Preservative		Parameter								Preservative Key	
EE		1009008.0046-01												1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Project Location/State		Lab Project #		Lab PM									
I74		Rock Island County, IL													
Sampler		Sample ID		Sampling		# of Containers		Matrix						Comments	
S-Cooper				Date Time											
1		1314V3-74-R01 (0-2)	11-29-16	0955	25			VOL	SOC	TOTAL TRAC	MOBILE	TWIP/SPOT TRAC MOBILE	PT/6 SLID.		6YE26

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

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Lab Courier
	EE	11-29-16	1105	Shimi Scott	TA-CHE	11/30/16	1020	
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 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

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: EE46-05  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter										Preservative Key	
EE		1009008-0040-01														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		500/2744															
Project Location/State		Lab Project #															
Rock Island County, IL		500/2744															
Sampler		Lab PM															
S-Copy		D-weight															
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Voc	Svoc	Total HAP Metals	Turbidity Particulates	pH/°C Solids						Comments
			Date	Time													
2		1314V3-75-B01(0-2)	11/24/16	1005	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	Lab Courier
<i>[Signature]</i>	EE	11/29/16	1715	<i>[Signature]</i>	DA-CRT	11/30/16	1020	
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: \_\_\_\_\_

# 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# \_\_\_\_\_

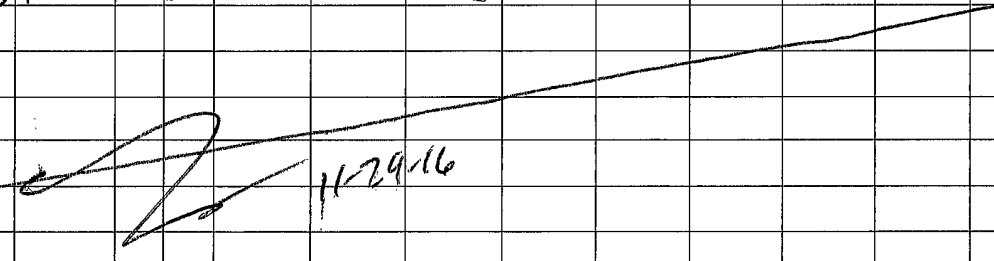
## Chain of Custody Record

Lab Job #: 500-120748

Chain of Custody Number: EG46-06

Page \_\_\_\_\_ of \_\_\_\_\_


Temperature °C of Cooler: \_\_\_\_\_

Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	Sew	Total TAC Metals	Total TAC/SR	TAC Metals	pH / % Solids	Comments
			Date	Time									
3		1314V3-21-B02(0-4)	11-24-16	1145	2 S		X	X	X	X	X		64C08
4		1314V3-21-B02(0-6)D	11-24-16	1145	2 S		X	X	X	X	X		
5		1314V3-21-B01(0-5)	11-24-16	1220	2 S		X	X	X	X	X		
6		1314V3-21-B01(570)	11-24-16	1225	2 J		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 VE	Date 11-24-16	Time 1705	Received By Sherrin Scott	Company TA-CENT	Date 11/30/16	Time 1020
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: \_\_\_\_\_  
 Shipped: FedEx  
 Hand Delivered: \_\_\_\_\_

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

Client Comments: \_\_\_\_\_  
 Lab Comments: \_\_\_\_\_

# Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120748-1

**Login Number: 120748**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	



# Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120748-1

**Login Number: 120748**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-120792-1  
Client Project/Site: IDOT - I-74 - WO 046

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

Attn: Mr. Dean Tiebout

*Jodie Bracken*

Authorized for release by:  
12/12/2016 4:04:13 PM  
Jodie Bracken, Project Management Assistant II  
[jodie.bracken@testamericainc.com](mailto:jodie.bracken@testamericainc.com)

Designee for  
Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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: 500-120792-1

**Job ID: 500-120792-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-120792-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 12/1/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

#### GC/MS VOA

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

#### GC/MS Semi VOA

Method(s) 8270D: The following sample contained one acid surrogate outside acceptance limits: 1314V3-66-B01 (0-7) (500-120792-1). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 364109 had 1 analyte outside control limits: Hexachlorocyclopentadiene. These results have been reported and qualified. (LCS 500-364109/2-A)

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-120792-E-1-N MS) and (500-120792-E-1-O MSD)

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

#### Metals

Method(s) 6010B: The instrument blank for analytical batch 500-363473 at line 100 contained Iron greater than the reporting limit (RL); associated samples were not reanalyzed because they contained Iron greater than 10 times the amount found in the instrument blank. The data have been qualified and reported.

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

#### General Chemistry

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

#### Organic Prep

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

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Lab Sample ID: 500-120792-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.7		0.61	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.61	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.24	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	3.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19		0.12	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000	B	12	3.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.61	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.2		0.30	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.61	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	12	4.7	mg/Kg	1	☼	6010B	Total/NA
Lead	8.5		0.30	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9600		6.1	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.61	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	14	B	0.61	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		30	5.0	mg/Kg	1	☼	6010B	Total/NA
Sodium	430		61	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.30	0.089	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.033	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.58		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.033	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.088		0.039	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.065		0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.029	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.039		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.059		0.039	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.022	J	0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.040		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.029	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.023	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.8		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	11000	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

## Client Sample ID: 1314V3-66-B01 (0-7)D (Continued)

## Lab Sample ID: 500-120792-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	9.6		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5800		5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	740		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	420		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.94		0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.087	J	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.0080		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.073		0.0075	0.0075	mg/L	1		6010B	SPLP East
Mercury	0.028		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-66-B02 (0-6)

## Lab Sample ID: 500-120792-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.012	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.035	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.027	J	0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.011	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.017	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.029	J	0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.016	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.5		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	91		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	2600	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.58	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.6		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B ^	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	7.8		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		5.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	670		0.58	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	18	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	840		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		58	7.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.5		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.085	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

## Client Sample ID: 1314V3-66-B02 (0-6) (Continued)

## Lab Sample ID: 500-120792-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	40		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.018	J	0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B04 (0-7)

## Lab Sample ID: 500-120792-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0073	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.014	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.012	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.6		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J	0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	6500	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.1		0.28	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	9.1		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	8.0		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4400		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	190		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.0	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	850		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	84		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.91		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.84		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.41		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.022	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B04 (7-13)

## Lab Sample ID: 500-120792-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.033	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0069	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.082		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.075		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.043		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.045		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (7-13) (Continued)**

**Lab Sample ID: 500-120792-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.12	J	0.19	0.070	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.068		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.025	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.052		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.032	J	0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.27	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.8		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	73		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.23	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	4.1		2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA
Calcium	8600	B	12	3.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.29	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B ^	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	50		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4700		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	940		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.32	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	150		59	7.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	69		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.18	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.024		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.42	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.089		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.047		0.019	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-67-B05 (0-6)**

**Lab Sample ID: 500-120792-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.019	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.026	J	0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.035	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.012	J	0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.022	J	0.035	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.014	J	0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.035	0.0092	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

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

TestAmerica Job ID: 500-120792-1

## Client Sample ID: 1314V3-67-B05 (0-6) (Continued)

## Lab Sample ID: 500-120792-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.26	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.4		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	4.2		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	42000	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B ^	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19	B	0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		27	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	860		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.95		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.27	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.046		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA
pH	9.0		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B03 (0-4)

## Lab Sample ID: 500-120792-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0059	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0099	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0099	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0064	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.012	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.33	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.1		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.4		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	7.9		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

## Client Sample ID: 1314V3-67-B03 (0-4) (Continued)

## Lab Sample ID: 500-120792-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	13000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15	B	0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	860		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	600		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.91		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.91		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.52		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.67		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B02 (0-6)

## Lab Sample ID: 500-120792-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.29	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.9		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	120		0.50	0.091	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	8800	B	10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.50	0.086	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	8.5		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	6.3		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5400		5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	960		0.50	0.099	mg/Kg	1	☼	6010B	Total/NA
Nickel	17	B	0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	820		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	51		50	6.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.6		0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.25	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	27		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.72		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.076	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.015	J	0.018	0.0097	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B01 (0-5)

## Lab Sample ID: 500-120792-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.035	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (0-5) (Continued)**

**Lab Sample ID: 500-120792-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.047		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.045		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.023	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.023	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.034	J	0.037	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.026	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.037	0.0095	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.6		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.54	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	3.4		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	22000	B	11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.8	B	0.54	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	9.0		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	32		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Sodium	97		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.54	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.88		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0028	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Iron	0.44		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.0091		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.81		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.20	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.074		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.017	0.0087	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-67-B01 (5-9)**

**Lab Sample ID: 500-120792-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.011	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.021	J	0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.010	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.022	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

## Client Sample ID: 1314V3-67-B01 (5-9) (Continued)

## Lab Sample ID: 500-120792-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.011	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.4		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	86		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7		2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	9200	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.3		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	50		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5600		5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	830		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.87		0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.88		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0034	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.033		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.28	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.25		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.32		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.045		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B08 (0-4)

## Lab Sample ID: 500-120792-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.27	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.6		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	76		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	2700	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	7.2		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2000		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

## Client Sample ID: 1314V3-67-B08 (0-4) (Continued)

## Lab Sample ID: 500-120792-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	480		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	680		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.50	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.057	J	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.024		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B07 (0-4)

## Lab Sample ID: 500-120792-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	74		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	4000	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.6	B	0.53	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.4		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	9.4		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.1		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2200		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B	0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	600		27	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.79		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	33		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.093	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.019		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-67-B06 (0-4)

## Lab Sample ID: 500-120792-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.013	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.022	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.020	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.016	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.014	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B06 (0-4) (Continued)**

**Lab Sample ID: 500-120792-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.029	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.020	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.013	J	0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0077	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.6		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.53	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	3.2		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	6400	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.53	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.6		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	9.9		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3200		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11	B	0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	740		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.96		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.33		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.48	F1	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.032		0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Sample Summary

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

TestAmerica Job ID: 500-120792-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120792-1	1314V3-66-B01 (0-7)	Solid	11/30/16 09:15	12/01/16 09:25
500-120792-2	1314V3-66-B01 (0-7)D	Solid	11/30/16 09:15	12/01/16 09:25
500-120792-3	1314V3-66-B02 (0-6)	Solid	11/30/16 09:30	12/01/16 09:25
500-120792-4	1314V3-67-B04 (0-7)	Solid	11/30/16 14:25	12/01/16 09:25
500-120792-5	1314V3-67-B04 (7-13)	Solid	11/30/16 14:30	12/01/16 09:25
500-120792-6	1314V3-67-B05 (0-6)	Solid	11/30/16 14:50	12/01/16 09:25
500-120792-7	1314V3-67-B03 (0-4)	Solid	11/30/16 15:25	12/01/16 09:25
500-120792-8	1314V3-67-B02 (0-6)	Solid	11/30/16 15:40	12/01/16 09:25
500-120792-9	1314V3-67-B01 (0-5)	Solid	11/30/16 16:00	12/01/16 09:25
500-120792-10	1314V3-67-B01 (5-9)	Solid	11/30/16 16:05	12/01/16 09:25
500-120792-11	1314V3-67-B08 (0-4)	Solid	11/30/16 16:20	12/01/16 09:25
500-120792-12	1314V3-67-B07 (0-4)	Solid	11/30/16 16:30	12/01/16 09:25
500-120792-13	1314V3-67-B06 (0-4)	Solid	11/30/16 16:45	12/01/16 09:25

# Client Sample Results

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Lab Sample ID: 500-120792-1**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/01/16 16:55	12/06/16 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	12/01/16 16:55	12/06/16 18:09	1
Dibromofluoromethane	108		75 - 120	12/01/16 16:55	12/06/16 18:09	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/06/16 18:09	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/06/16 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1

TestAmerica Chicago



# Client Sample Results

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Lab Sample ID: 500-120792-1**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachlorocyclopentadiene	<0.82	* F1	0.82	0.23	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dinitrophenol	<0.82	F1	0.82	0.72	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Pentachlorophenol	<0.82	F1	0.82	0.65	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
4,6-Dinitro-2-methylphenol	<0.82	F1	0.82	0.33	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.077	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Lab Sample ID: 500-120792-1**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Dibenz(a,h)anthracene	<0.040	F1	0.040	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
Benzo[g,h,i]perylene	<0.040	F1	0.040	0.013	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 13:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	113		40 - 130				12/08/16 07:23	12/09/16 13:54	1
Phenol-d5	124	X	36 - 123				12/08/16 07:23	12/09/16 13:54	1
Nitrobenzene-d5	108		33 - 124				12/08/16 07:23	12/09/16 13:54	1
2-Fluorobiphenyl	92		42 - 115				12/08/16 07:23	12/09/16 13:54	1
2,4,6-Tribromophenol	86		25 - 130				12/08/16 07:23	12/09/16 13:54	1
Terphenyl-d14	103		25 - 150				12/08/16 07:23	12/09/16 13:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Arsenic</b>	<b>7.7</b>		0.61	0.28	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Barium</b>	<b>58</b>		0.61	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Beryllium</b>	<b>0.49</b>		0.24	0.053	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Boron</b>	<b>2.5</b>	J	3.0	0.42	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Cadmium</b>	<b>0.19</b>		0.12	0.035	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Calcium</b>	<b>15000</b>	B	12	3.9	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Chromium</b>	<b>10</b>	B	0.61	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 22:16	1
<b>Cobalt</b>	<b>6.2</b>		0.30	0.069	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Copper</b>	<b>11</b>		0.61	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Iron</b>	<b>13000</b>	B ^	12	4.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Lead</b>	<b>8.5</b>		0.30	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Magnesium</b>	<b>9600</b>		6.1	2.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Manganese</b>	<b>360</b>		0.61	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Nickel</b>	<b>14</b>	B	0.61	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Potassium</b>	<b>770</b>		30	5.0	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Selenium	<0.61		0.61	0.30	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
Silver	<0.30		0.30	0.071	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Sodium</b>	<b>430</b>		61	8.0	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Thallium</b>	<b>1.1</b>		0.61	0.30	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Vanadium</b>	<b>23</b>		0.30	0.089	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1
<b>Zinc</b>	<b>28</b>		1.2	0.38	mg/Kg	☼	12/02/16 09:27	12/02/16 23:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.65</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:23	1
<b>Boron</b>	<b>0.053</b>	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:23	1

TestAmerica Chicago

# Client Sample Results

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Lab Sample ID: 500-120792-1**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 16:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 16:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 16:23	1
<b>Manganese</b>	<b>0.27</b>		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
<b>Selenium</b>	<b>0.021</b>	<b>J</b>	0.050	0.020	mg/L		12/05/16 08:13	12/05/16 16:23	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:23	1
<b>Zinc</b>	<b>0.033</b>	<b>J B</b>	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.58</b>		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 01:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:44	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.021</b>		0.018	0.0094	mg/Kg	☼	12/02/16 14:45	12/05/16 11:15	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU			12/02/16 18:26	1

# Client Sample Results

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

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 120	12/01/16 16:55	12/06/16 18:34	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/06/16 18:34	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/06/16 18:34	1
Toluene-d8 (Surr)	107		75 - 123	12/01/16 16:55	12/06/16 18:34	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachlorocyclopentadiene	<0.80	*	0.80	0.23	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Phenanthrene</b>	<b>0.033</b>	<b>J</b>	0.039	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Fluoranthene</b>	<b>0.088</b>		0.039	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Pyrene</b>	<b>0.065</b>		0.039	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Benzo[a]anthracene</b>	<b>0.029</b>	<b>J</b>	0.039	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

Date Collected: 11/30/16 09:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.6

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.039</b>		0.039	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Benzo[b]fluoranthene</b>	<b>0.059</b>		0.039	0.0086	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Benzo[k]fluoranthene</b>	<b>0.022 J</b>		0.039	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Benzo[a]pyrene</b>	<b>0.040</b>		0.039	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.029 J</b>		0.039	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
<b>Benzo[g,h,i]perylene</b>	<b>0.023 J</b>		0.039	0.013	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 14:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		40 - 130	12/08/16 07:23	12/09/16 14:20	1
Phenol-d5	98		36 - 123	12/08/16 07:23	12/09/16 14:20	1
Nitrobenzene-d5	85		33 - 124	12/08/16 07:23	12/09/16 14:20	1
2-Fluorobiphenyl	74		42 - 115	12/08/16 07:23	12/09/16 14:20	1
2,4,6-Tribromophenol	69		25 - 130	12/08/16 07:23	12/09/16 14:20	1
Terphenyl-d14	80		25 - 150	12/08/16 07:23	12/09/16 14:20	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.25 J</b>		1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Arsenic</b>	<b>5.8</b>		0.58	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Barium</b>	<b>58</b>		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Beryllium</b>	<b>0.48</b>		0.23	0.050	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Boron</b>	<b>2.5 J</b>		2.9	0.40	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Cadmium</b>	<b>0.14</b>		0.12	0.033	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Calcium</b>	<b>11000 B</b>		12	3.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Chromium</b>	<b>11 B</b>		0.58	0.099	mg/Kg	☼	12/02/16 09:27	12/03/16 22:20	1
<b>Cobalt</b>	<b>6.1</b>		0.29	0.065	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Copper</b>	<b>9.6</b>		0.58	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Iron</b>	<b>13000 B ^</b>		12	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Lead</b>	<b>15</b>		0.29	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Magnesium</b>	<b>5800</b>		5.8	2.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Manganese</b>	<b>350</b>		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Nickel</b>	<b>12 B</b>		0.58	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Potassium</b>	<b>740</b>		29	4.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Selenium</b>	<b>0.31 J</b>		0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Sodium</b>	<b>420</b>		58	7.6	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Thallium</b>	<b>0.94</b>		0.58	0.28	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Vanadium</b>	<b>22</b>		0.29	0.084	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1
<b>Zinc</b>	<b>28</b>		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/02/16 23:37	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.65</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:27	1
<b>Boron</b>	<b>0.087 J</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:27	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 16:27	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 16:27	1
<b>Lead</b>	<b>0.0080</b>		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 16:27	1
<b>Manganese</b>	<b>0.14</b>		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 16:27	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:27	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 16:27	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.073</b>		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 02:03	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:48	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:36	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.028</b>		0.019	0.0099	mg/Kg	☼	12/02/16 14:45	12/05/16 13:10	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.8</b>		0.2	0.2	SU			12/02/16 18:33	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B02 (0-6)**

**Lab Sample ID: 500-120792-3**

**Date Collected: 11/30/16 09:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 82.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	12/01/16 16:55	12/06/16 18:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 120	12/01/16 16:55	12/06/16 18:59	1
Dibromofluoromethane	107		75 - 120	12/01/16 16:55	12/06/16 18:59	1
1,2-Dichloroethane-d4 (Surr)	96		69 - 134	12/01/16 16:55	12/06/16 18:59	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/06/16 18:59	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B02 (0-6)**

**Lab Sample ID: 500-120792-3**

**Date Collected: 11/30/16 09:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 82.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Phenanthrene</b>	<b>0.012</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Fluoranthene</b>	<b>0.035</b>	<b>J</b>	0.038	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Pyrene</b>	<b>0.027</b>	<b>J</b>	0.038	0.0076	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Benzo[a]anthracene</b>	<b>0.011</b>	<b>J</b>	0.038	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B02 (0-6)**

**Lab Sample ID: 500-120792-3**

**Date Collected: 11/30/16 09:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 82.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.017</b>	<b>J</b>	0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Benzo[b]fluoranthene</b>	<b>0.029</b>	<b>J</b>	0.038	0.0083	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Benzo[a]pyrene</b>	<b>0.016</b>	<b>J</b>	0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.015</b>	<b>J</b>	0.038	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 14:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	108		40 - 130				12/08/16 07:23	12/09/16 14:45	1
Phenol-d5	118		36 - 123				12/08/16 07:23	12/09/16 14:45	1
Nitrobenzene-d5	103		33 - 124				12/08/16 07:23	12/09/16 14:45	1
2-Fluorobiphenyl	88		42 - 115				12/08/16 07:23	12/09/16 14:45	1
2,4,6-Tribromophenol	87		25 - 130				12/08/16 07:23	12/09/16 14:45	1
Terphenyl-d14	100		25 - 150				12/08/16 07:23	12/09/16 14:45	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Arsenic</b>	<b>4.5</b>		0.58	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Barium</b>	<b>91</b>		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Beryllium</b>	<b>0.53</b>		0.23	0.050	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Boron</b>	<b>2.0</b>	<b>J</b>	2.9	0.41	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Cadmium</b>	<b>0.24</b>		0.12	0.034	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Calcium</b>	<b>2600</b>	<b>B</b>	12	3.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.58	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 22:24	1
<b>Cobalt</b>	<b>6.6</b>		0.29	0.066	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Copper</b>	<b>11</b>		0.58	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Iron</b>	<b>15000</b>	<b>B ^</b>	12	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Lead</b>	<b>7.8</b>		0.29	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Magnesium</b>	<b>1800</b>		5.8	2.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Manganese</b>	<b>670</b>		0.58	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Nickel</b>	<b>18</b>	<b>B</b>	0.58	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Potassium</b>	<b>840</b>		29	4.8	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Selenium</b>	<b>0.47</b>	<b>J</b>	0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Sodium</b>	<b>140</b>		58	7.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Thallium</b>	<b>1.5</b>		0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Vanadium</b>	<b>17</b>		0.29	0.085	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1
<b>Zinc</b>	<b>40</b>		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/02/16 23:44	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.32</b>	<b>J</b>	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:32	1
Boron	<0.50		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:32	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B02 (0-6)**

**Lab Sample ID: 500-120792-3**

**Date Collected: 11/30/16 09:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 82.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 16:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 16:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 16:32	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 16:32	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 16:32	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 16:32	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:51	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:38	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0098	mg/Kg	☼	12/02/16 14:45	12/05/16 11:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/16 18:40	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (0-7)**

**Lab Sample ID: 500-120792-4**

**Date Collected: 11/30/16 14:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/01/16 16:55	12/06/16 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 120	12/01/16 16:55	12/06/16 19:25	1
Dibromofluoromethane	111		75 - 120	12/01/16 16:55	12/06/16 19:25	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/06/16 19:25	1
Toluene-d8 (Surr)	107		75 - 123	12/01/16 16:55	12/06/16 19:25	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (0-7)**

**Lab Sample ID: 500-120792-4**

**Date Collected: 11/30/16 14:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachlorocyclopentadiene	<0.75	*	0.75	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
<b>Phenanthrene</b>	<b>0.0073</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
<b>Fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.037	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
<b>Pyrene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (0-7)**

**Lab Sample ID: 500-120792-4**

Date Collected: 11/30/16 14:25

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 86.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/08/16 07:23	12/09/16 15:11	1
Phenol-d5	96		36 - 123	12/08/16 07:23	12/09/16 15:11	1
Nitrobenzene-d5	83		33 - 124	12/08/16 07:23	12/09/16 15:11	1
2-Fluorobiphenyl	73		42 - 115	12/08/16 07:23	12/09/16 15:11	1
2,4,6-Tribromophenol	56		25 - 130	12/08/16 07:23	12/09/16 15:11	1
Terphenyl-d14	80		25 - 150	12/08/16 07:23	12/09/16 15:11	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.23	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Arsenic	3.6		0.55	0.25	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Barium	61		0.55	0.10	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Beryllium	0.45		0.22	0.048	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Boron	2.5	J	2.8	0.39	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Cadmium	0.10	J	0.11	0.032	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Calcium	6500	B	11	3.6	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Chromium	10	B	0.55	0.095	mg/Kg	☼	12/02/16 09:27	12/03/16 22:29	1
Cobalt	4.1		0.28	0.062	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Copper	9.1		0.55	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Iron	13000	B ^	11	4.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Lead	8.0		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Magnesium	4400		5.5	2.2	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Manganese	190		0.55	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Nickel	9.0	B	0.55	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Potassium	850		28	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Selenium	0.37	J	0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Sodium	84		55	7.3	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Thallium	0.91		0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Vanadium	15		0.28	0.081	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1
Zinc	30		1.1	0.35	mg/Kg	☼	12/02/16 09:27	12/02/16 23:50	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.84		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:37	1
Boron	0.11	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:37	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (0-7)**

**Lab Sample ID: 500-120792-4**

**Date Collected: 11/30/16 14:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
<b>Manganese</b>	<b>0.41</b>		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:37	1
<b>Zinc</b>	<b>0.022</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:37	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.20</b>		0.025	0.010	mg/L	-	12/05/16 08:18	12/06/16 02:17	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 08:13	12/06/16 15:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 08:13	12/06/16 15:54	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:39	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.031</b>		0.019	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 11:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>7.9</b>		0.2	0.2	SU	-		12/02/16 18:47	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (7-13)**

**Lab Sample ID: 500-120792-5**

**Date Collected: 11/30/16 14:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.1**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Carbon disulfide	<0.0045		0.0045	0.00095	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/01/16 16:55	12/07/16 05:02	1
Dibromofluoromethane	108		75 - 120	12/01/16 16:55	12/07/16 05:02	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/07/16 05:02	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/07/16 05:02	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (7-13)**

**Lab Sample ID: 500-120792-5**

**Date Collected: 11/30/16 14:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Phenanthrene</b>	<b>0.033</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Anthracene</b>	<b>0.0069</b>	<b>J</b>	0.038	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Fluoranthene</b>	<b>0.082</b>		0.038	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Pyrene</b>	<b>0.075</b>		0.038	0.0076	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Benzo[a]anthracene</b>	<b>0.043</b>		0.038	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (7-13)**

**Lab Sample ID: 500-120792-5**

Date Collected: 11/30/16 14:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 85.1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.045</b>		0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.12</b>	<b>J</b>	0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Benzo[b]fluoranthene</b>	<b>0.068</b>		0.038	0.0083	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Benzo[k]fluoranthene</b>	<b>0.025</b>	<b>J</b>	0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Benzo[a]pyrene</b>	<b>0.052</b>		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.032</b>	<b>J</b>	0.038	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Benzo[g,h,i]perylene</b>	<b>0.022</b>	<b>J</b>	0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 15:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	108		40 - 130				12/08/16 07:23	12/09/16 15:36	1
Phenol-d5	117		36 - 123				12/08/16 07:23	12/09/16 15:36	1
Nitrobenzene-d5	98		33 - 124				12/08/16 07:23	12/09/16 15:36	1
2-Fluorobiphenyl	85		42 - 115				12/08/16 07:23	12/09/16 15:36	1
2,4,6-Tribromophenol	63		25 - 130				12/08/16 07:23	12/09/16 15:36	1
Terphenyl-d14	94		25 - 150				12/08/16 07:23	12/09/16 15:36	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.27</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Arsenic</b>	<b>3.8</b>		0.59	0.27	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Barium</b>	<b>73</b>		0.59	0.11	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Beryllium</b>	<b>0.50</b>		0.23	0.051	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Boron</b>	<b>4.1</b>		2.9	0.41	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Cadmium</b>	<b>0.30</b>		0.12	0.034	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Calcium</b>	<b>8600</b>	<b>B</b>	12	3.8	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.59	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 22:33	1
<b>Cobalt</b>	<b>5.2</b>		0.29	0.066	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Copper</b>	<b>12</b>		0.59	0.13	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Iron</b>	<b>12000</b>	<b>B ^</b>	12	4.5	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Lead</b>	<b>50</b>		0.29	0.15	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Magnesium</b>	<b>4700</b>		5.9	2.4	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Manganese</b>	<b>310</b>		0.59	0.12	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Nickel</b>	<b>12</b>	<b>B</b>	0.59	0.16	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Potassium</b>	<b>940</b>		29	4.8	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Selenium</b>	<b>0.32</b>	<b>J</b>	0.59	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
Silver	<0.29		0.29	0.069	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Sodium</b>	<b>150</b>		59	7.7	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Thallium</b>	<b>1.0</b>		0.59	0.29	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Vanadium</b>	<b>16</b>		0.29	0.086	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1
<b>Zinc</b>	<b>69</b>		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/02/16 23:57	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.76</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:42	1
<b>Boron</b>	<b>0.18</b>	<b>J</b>	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:42	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (7-13)**

**Lab Sample ID: 500-120792-5**

**Date Collected: 11/30/16 14:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.1**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0040</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
<b>Lead</b>	<b>0.024</b>		0.0075	0.0075	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
<b>Manganese</b>	<b>2.3</b>		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
<b>Nickel</b>	<b>0.018</b>	<b>J</b>	0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:42	1
<b>Zinc</b>	<b>0.42</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:42	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.089</b>		0.0075	0.0075	mg/L	-	12/05/16 08:18	12/06/16 02:23	1
<b>Manganese</b>	<b>0.17</b>		0.025	0.010	mg/L	-	12/05/16 08:18	12/06/16 02:23	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 08:13	12/06/16 15:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 08:13	12/06/16 15:58	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:41	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.047</b>		0.019	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 11:36	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.1</b>		0.2	0.2	SU	-		12/02/16 18:54	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B05 (0-6)**

**Lab Sample ID: 500-120792-6**

**Date Collected: 11/30/16 14:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.5**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/01/16 16:55	12/07/16 05:28	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 05:28	1
1,2-Dichloroethane-d4 (Surr)	113		69 - 134	12/01/16 16:55	12/07/16 05:28	1
Toluene-d8 (Surr)	106		75 - 123	12/01/16 16:55	12/07/16 05:28	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B05 (0-6)**

**Lab Sample ID: 500-120792-6**

**Date Collected: 11/30/16 14:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachlorocyclopentadiene	<0.72 *		0.72	0.20	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Phenanthrene</b>	<b>0.019</b>	<b>J</b>	0.035	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Fluoranthene</b>	<b>0.026</b>	<b>J</b>	0.035	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Pyrene</b>	<b>0.023</b>	<b>J</b>	0.035	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Benzo[a]anthracene</b>	<b>0.012</b>	<b>J</b>	0.035	0.0048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B05 (0-6)**

**Lab Sample ID: 500-120792-6**

**Date Collected: 11/30/16 14:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	0.035	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Benzo[b]fluoranthene</b>	<b>0.022</b>	<b>J</b>	0.035	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Benzo[k]fluoranthene	<0.035		0.035	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Benzo[a]pyrene</b>	<b>0.014</b>	<b>J</b>	0.035	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.012</b>	<b>J</b>	0.035	0.0092	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 16:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	102		40 - 130				12/08/16 07:23	12/09/16 16:02	1
Phenol-d5	114		36 - 123				12/08/16 07:23	12/09/16 16:02	1
Nitrobenzene-d5	98		33 - 124				12/08/16 07:23	12/09/16 16:02	1
2-Fluorobiphenyl	83		42 - 115				12/08/16 07:23	12/09/16 16:02	1
2,4,6-Tribromophenol	54		25 - 130				12/08/16 07:23	12/09/16 16:02	1
Terphenyl-d14	94		25 - 150				12/08/16 07:23	12/09/16 16:02	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.26</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Arsenic</b>	<b>4.4</b>		0.53	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Barium</b>	<b>47</b>		0.53	0.097	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Beryllium</b>	<b>0.48</b>		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Boron</b>	<b>4.2</b>		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Cadmium</b>	<b>0.28</b>		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Calcium</b>	<b>42000</b>	<b>B</b>	11	3.4	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.53	0.091	mg/Kg	☼	12/02/16 09:27	12/03/16 22:37	1
<b>Cobalt</b>	<b>5.3</b>		0.27	0.060	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Copper</b>	<b>12</b>		0.53	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Iron</b>	<b>13000</b>	<b>B ^</b>	11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Lead</b>	<b>11</b>		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Magnesium</b>	<b>17000</b>		5.3	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Manganese</b>	<b>290</b>		0.53	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Nickel</b>	<b>19</b>	<b>B</b>	0.53	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Potassium</b>	<b>1300</b>		27	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Selenium</b>	<b>0.33</b>	<b>J</b>	0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Sodium</b>	<b>860</b>		53	7.0	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Thallium</b>	<b>0.95</b>		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Vanadium</b>	<b>18</b>		0.27	0.077	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1
<b>Zinc</b>	<b>31</b>		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 00:04	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.53</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 16:47	1
<b>Boron</b>	<b>0.063</b>	<b>J</b>	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 16:47	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B05 (0-6)**

**Lab Sample ID: 500-120792-6**

**Date Collected: 11/30/16 14:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0024</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
<b>Manganese</b>	<b>1.6</b>		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
<b>Nickel</b>	<b>0.028</b>		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 16:47	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/05/16 08:13	12/05/16 16:47	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.0</b>		0.025	0.010	mg/L	-	12/05/16 08:18	12/06/16 02:46	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 08:13	12/06/16 16:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 08:13	12/06/16 16:01	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:42	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.046</b>		0.019	0.0099	mg/Kg	☼	12/02/16 14:45	12/05/16 11:38	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.0</b>		0.2	0.2	SU	-		12/02/16 19:01	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B03 (0-4)**

**Lab Sample ID: 500-120792-7**

**Date Collected: 11/30/16 15:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 05:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/01/16 16:55	12/07/16 05:53	1
Dibromofluoromethane	107		75 - 120	12/01/16 16:55	12/07/16 05:53	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/07/16 05:53	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/07/16 05:53	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B03 (0-4)**

**Lab Sample ID: 500-120792-7**

**Date Collected: 11/30/16 15:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
<b>Phenanthrene</b>	<b>0.0059</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
<b>Fluoranthene</b>	<b>0.0099</b>	<b>J</b>	0.037	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
<b>Pyrene</b>	<b>0.0099</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
<b>Benzo[a]anthracene</b>	<b>0.0064</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B03 (0-4)**

**Lab Sample ID: 500-120792-7**

**Date Collected: 11/30/16 15:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
<b>Benzo[b]fluoranthene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0081	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/08/16 07:23	12/09/16 16:28	1
Phenol-d5	111		36 - 123	12/08/16 07:23	12/09/16 16:28	1
Nitrobenzene-d5	98		33 - 124	12/08/16 07:23	12/09/16 16:28	1
2-Fluorobiphenyl	85		42 - 115	12/08/16 07:23	12/09/16 16:28	1
2,4,6-Tribromophenol	44		25 - 130	12/08/16 07:23	12/09/16 16:28	1
Terphenyl-d14	94		25 - 150	12/08/16 07:23	12/09/16 16:28	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.33</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Arsenic</b>	<b>4.1</b>		0.56	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Barium</b>	<b>56</b>		0.56	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Beryllium</b>	<b>0.53</b>		0.22	0.049	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Boron</b>	<b>2.7</b>	<b>J</b>	2.8	0.39	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Cadmium</b>	<b>0.17</b>		0.11	0.032	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Calcium</b>	<b>29000</b>	<b>B</b>	11	3.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.56	0.096	mg/Kg	☼	12/02/16 09:27	12/03/16 22:42	1
<b>Cobalt</b>	<b>6.4</b>		0.28	0.063	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Copper</b>	<b>11</b>		0.56	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Iron</b>	<b>14000</b>	<b>B</b>	11	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Lead</b>	<b>7.9</b>		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Magnesium</b>	<b>13000</b>		5.6	2.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Manganese</b>	<b>290</b>		0.56	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Nickel</b>	<b>15</b>	<b>B</b>	0.56	0.15	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Potassium</b>	<b>860</b>		28	4.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Sodium</b>	<b>600</b>		56	7.4	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Thallium</b>	<b>0.91</b>		0.56	0.28	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Vanadium</b>	<b>19</b>		0.28	0.082	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1
<b>Zinc</b>	<b>28</b>		1.1	0.36	mg/Kg	☼	12/02/16 09:27	12/03/16 00:27	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.91</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:03	1
<b>Boron</b>	<b>0.053</b>	<b>J</b>	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:03	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B03 (0-4)**

**Lab Sample ID: 500-120792-7**

**Date Collected: 11/30/16 15:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:03	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:03	1
<b>Manganese</b>	<b>0.52</b>		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:03	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:03	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:03	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.67</b>		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 02:53	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:05	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:44	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.039</b>		0.018	0.0093	mg/Kg	☼	12/02/16 14:45	12/05/16 11:40	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.9</b>		0.2	0.2	SU			12/02/16 19:08	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B02 (0-6)**

**Lab Sample ID: 500-120792-8**

**Date Collected: 11/30/16 15:40**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.2**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 06:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120	12/01/16 16:55	12/07/16 06:18	1
Dibromofluoromethane	106		75 - 120	12/01/16 16:55	12/07/16 06:18	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/07/16 06:18	1
Toluene-d8 (Surr)	104		75 - 123	12/01/16 16:55	12/07/16 06:18	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B02 (0-6)**

**Lab Sample ID: 500-120792-8**

**Date Collected: 11/30/16 15:40**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachlorocyclopentadiene	<0.74 *		0.74	0.21	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B02 (0-6)**

**Lab Sample ID: 500-120792-8**

**Date Collected: 11/30/16 15:40**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 16:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	79		40 - 130				12/08/16 07:23	12/09/16 16:53	1
Phenol-d5	86		36 - 123				12/08/16 07:23	12/09/16 16:53	1
Nitrobenzene-d5	74		33 - 124				12/08/16 07:23	12/09/16 16:53	1
2-Fluorobiphenyl	65		42 - 115				12/08/16 07:23	12/09/16 16:53	1
2,4,6-Tribromophenol	35		25 - 130				12/08/16 07:23	12/09/16 16:53	1
Terphenyl-d14	76		25 - 150				12/08/16 07:23	12/09/16 16:53	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.0	0.21	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Arsenic	2.9		0.50	0.23	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Barium	120		0.50	0.091	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Beryllium	0.41		0.20	0.043	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Boron	2.3	J	2.5	0.35	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Cadmium	0.26		0.10	0.029	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Calcium	8800	B	10	3.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Chromium	11	B	0.50	0.086	mg/Kg	☼	12/02/16 09:27	12/03/16 22:47	1
Cobalt	7.0		0.25	0.056	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Copper	8.5		0.50	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Iron	11000	B	10	3.9	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Lead	6.3		0.25	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Magnesium	5400		5.0	2.0	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Manganese	960		0.50	0.099	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Nickel	17	B	0.50	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Potassium	820		25	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Selenium	0.30	J	0.50	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Silver	<0.25		0.25	0.058	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Sodium	51		50	6.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Thallium	1.6		0.50	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Vanadium	15		0.25	0.073	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1
Zinc	27		1.0	0.32	mg/Kg	☼	12/02/16 09:27	12/03/16 00:33	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.72		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:08	1
Boron	0.076	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:08	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B02 (0-6)**

**Lab Sample ID: 500-120792-8**

**Date Collected: 11/30/16 15:40**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:08	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:08	1
<b>Manganese</b>	<b>0.11</b>		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:08	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:08	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:08	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:08	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:45	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015</b>	<b>J</b>	0.018	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 11:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.2</b>		0.2	0.2	SU			12/02/16 19:16	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (0-5)**

**Lab Sample ID: 500-120792-9**

**Date Collected: 11/30/16 16:00**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 120	12/01/16 16:55	12/07/16 14:32	1
Dibromofluoromethane	109		75 - 120	12/01/16 16:55	12/07/16 14:32	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/07/16 14:32	1
Toluene-d8 (Surr)	107		75 - 123	12/01/16 16:55	12/07/16 14:32	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
1,3-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (0-5)**

**Lab Sample ID: 500-120792-9**

**Date Collected: 11/30/16 16:00**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachlorocyclopentadiene	<0.74	*	0.74	0.21	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
N-Nitrosodiphenylamine	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Phenanthrene</b>	<b>0.035</b>	<b>J</b>	0.037	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Fluoranthene</b>	<b>0.047</b>		0.037	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Pyrene</b>	<b>0.045</b>		0.037	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Benzo[a]anthracene</b>	<b>0.023</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (0-5)**

**Lab Sample ID: 500-120792-9**

**Date Collected: 11/30/16 16:00**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.023</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Benzo[b]fluoranthene</b>	<b>0.034</b>	<b>J</b>	0.037	0.0079	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Benzo[k]fluoranthene</b>	<b>0.015</b>	<b>J</b>	0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Benzo[a]pyrene</b>	<b>0.026</b>	<b>J</b>	0.037	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.015</b>	<b>J</b>	0.037	0.0095	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/08/16 07:23	12/09/16 17:19	1
Phenol-d5	106		36 - 123	12/08/16 07:23	12/09/16 17:19	1
Nitrobenzene-d5	94		33 - 124	12/08/16 07:23	12/09/16 17:19	1
2-Fluorobiphenyl	81		42 - 115	12/08/16 07:23	12/09/16 17:19	1
2,4,6-Tribromophenol	52		25 - 130	12/08/16 07:23	12/09/16 17:19	1
Terphenyl-d14	90		25 - 150	12/08/16 07:23	12/09/16 17:19	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.28</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Arsenic</b>	<b>3.6</b>		0.54	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Barium</b>	<b>64</b>		0.54	0.098	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Beryllium</b>	<b>0.41</b>		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Boron</b>	<b>3.4</b>		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Cadmium</b>	<b>0.24</b>		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Calcium</b>	<b>22000</b>	<b>B</b>	11	3.5	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Chromium</b>	<b>8.8</b>	<b>B</b>	0.54	0.092	mg/Kg	☼	12/02/16 09:27	12/03/16 22:58	1
<b>Cobalt</b>	<b>5.1</b>		0.27	0.061	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Copper</b>	<b>9.0</b>		0.54	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Iron</b>	<b>11000</b>	<b>B</b>	11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Lead</b>	<b>32</b>		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Magnesium</b>	<b>13000</b>		5.4	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Manganese</b>	<b>460</b>		0.54	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Nickel</b>	<b>12</b>	<b>B</b>	0.54	0.15	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Potassium</b>	<b>750</b>		27	4.4	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Selenium	<0.54		0.54	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Sodium</b>	<b>97</b>		54	7.1	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Thallium</b>	<b>1.1</b>		0.54	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Vanadium</b>	<b>16</b>		0.27	0.078	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1
<b>Zinc</b>	<b>39</b>		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 00:40	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.88</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:12	1
<b>Boron</b>	<b>0.063</b>	<b>J</b>	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:12	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (0-5)**

**Lab Sample ID: 500-120792-9**

**Date Collected: 11/30/16 16:00**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0028</b>	<b>J</b>	0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:12	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
<b>Iron</b>	<b>0.44</b>		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:12	1
<b>Lead</b>	<b>0.0091</b>		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:12	1
<b>Manganese</b>	<b>0.81</b>		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:12	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:12	1
<b>Zinc</b>	<b>0.20</b>	<b>J B</b>	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:12	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.074</b>		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 03:06	1
<b>Manganese</b>	<b>0.24</b>		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 03:06	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:18	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:46	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.026</b>		0.017	0.0087	mg/Kg	☼	12/02/16 14:45	12/05/16 11:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.3</b>		0.2	0.2	SU			12/02/16 19:23	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (5-9)**

**Lab Sample ID: 500-120792-10**

**Date Collected: 11/30/16 16:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 07:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/01/16 16:55	12/07/16 07:09	1
Dibromofluoromethane	108		75 - 120	12/01/16 16:55	12/07/16 07:09	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/07/16 07:09	1
Toluene-d8 (Surr)	106		75 - 123	12/01/16 16:55	12/07/16 07:09	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (5-9)**

**Lab Sample ID: 500-120792-10**

**Date Collected: 11/30/16 16:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachlorocyclopentadiene	<0.78	*	0.78	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Methylnaphthalene	<0.078		0.078	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dinitrophenol	<0.78		0.78	0.69	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
<b>Phenanthrene</b>	<b>0.011</b>	<b>J</b>	0.039	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
<b>Fluoranthene</b>	<b>0.021</b>	<b>J</b>	0.039	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
<b>Pyrene</b>	<b>0.019</b>	<b>J</b>	0.039	0.0077	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
<b>Benzo[a]anthracene</b>	<b>0.010</b>	<b>J</b>	0.039	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (5-9)**

**Lab Sample ID: 500-120792-10**

**Date Collected: 11/30/16 16:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
<b>Benzo[b]fluoranthene</b>	<b>0.022</b>	<b>J</b>	0.039	0.0084	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
<b>Benzo[a]pyrene</b>	<b>0.013</b>	<b>J</b>	0.039	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.011</b>	<b>J</b>	0.039	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/08/16 07:23	12/09/16 17:44	1
Phenol-d5	106		36 - 123	12/08/16 07:23	12/09/16 17:44	1
Nitrobenzene-d5	93		33 - 124	12/08/16 07:23	12/09/16 17:44	1
2-Fluorobiphenyl	81		42 - 115	12/08/16 07:23	12/09/16 17:44	1
2,4,6-Tribromophenol	47		25 - 130	12/08/16 07:23	12/09/16 17:44	1
Terphenyl-d14	89		25 - 150	12/08/16 07:23	12/09/16 17:44	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.25</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Arsenic</b>	<b>3.4</b>		0.58	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Barium</b>	<b>86</b>		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Beryllium</b>	<b>0.48</b>		0.23	0.050	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Boron</b>	<b>3.7</b>		2.9	0.40	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Cadmium</b>	<b>0.21</b>		0.12	0.033	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Calcium</b>	<b>9200</b>	<b>B</b>	12	3.7	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Chromium</b>	<b>10</b>	<b>B</b>	0.58	0.099	mg/Kg	☼	12/02/16 09:27	12/03/16 23:02	1
<b>Cobalt</b>	<b>4.3</b>		0.29	0.065	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Copper</b>	<b>13</b>		0.58	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Iron</b>	<b>11000</b>	<b>B</b>	12	4.5	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Lead</b>	<b>50</b>		0.29	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Magnesium</b>	<b>5600</b>		5.8	2.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Manganese</b>	<b>230</b>		0.58	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Nickel</b>	<b>11</b>	<b>B</b>	0.58	0.16	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Potassium</b>	<b>830</b>		29	4.7	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Selenium</b>	<b>0.37</b>	<b>J</b>	0.58	0.29	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
Silver	<0.29		0.29	0.068	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Sodium</b>	<b>180</b>		58	7.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Thallium</b>	<b>0.87</b>		0.58	0.28	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Vanadium</b>	<b>16</b>		0.29	0.084	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1
<b>Zinc</b>	<b>60</b>		1.2	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 00:47	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.88</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:17	1
<b>Boron</b>	<b>0.095</b>	<b>J</b>	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:17	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (5-9)**

**Lab Sample ID: 500-120792-10**

**Date Collected: 11/30/16 16:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0034</b>	<b>J</b>	0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:17	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:17	1
<b>Lead</b>	<b>0.033</b>		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:17	1
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
<b>Nickel</b>	<b>0.019</b>	<b>J</b>	0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:17	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:17	1
<b>Zinc</b>	<b>0.28</b>	<b>J B</b>	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:17	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.25</b>		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 03:13	1
<b>Manganese</b>	<b>0.32</b>		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 03:13	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:22	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:51	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.045</b>		0.020	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 11:47	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.2</b>		0.2	0.2	SU			12/02/16 19:30	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B08 (0-4)**

**Lab Sample ID: 500-120792-11**

**Date Collected: 11/30/16 16:20**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/01/16 16:55	12/07/16 13:16	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 13:16	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/01/16 16:55	12/07/16 13:16	1
Toluene-d8 (Surr)	105		75 - 123	12/01/16 16:55	12/07/16 13:16	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B08 (0-4)**

**Lab Sample ID: 500-120792-11**

**Date Collected: 11/30/16 16:20**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B08 (0-4)**

**Lab Sample ID: 500-120792-11**

**Date Collected: 11/30/16 16:20**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.9**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		40 - 130	12/08/16 07:23	12/09/16 18:10	1
Phenol-d5	114		36 - 123	12/08/16 07:23	12/09/16 18:10	1
Nitrobenzene-d5	100		33 - 124	12/08/16 07:23	12/09/16 18:10	1
2-Fluorobiphenyl	86		42 - 115	12/08/16 07:23	12/09/16 18:10	1
2,4,6-Tribromophenol	58		25 - 130	12/08/16 07:23	12/09/16 18:10	1
Terphenyl-d14	96		25 - 150	12/08/16 07:23	12/09/16 18:10	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	1.1	0.23	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Arsenic	6.6		0.55	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Barium	76		0.55	0.10	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Beryllium	0.53		0.22	0.048	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Boron	1.7	J	2.8	0.39	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Cadmium	0.18		0.11	0.032	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Calcium	2700	B	11	3.6	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Chromium	12	B	0.55	0.095	mg/Kg	☼	12/02/16 09:27	12/03/16 23:06	1
Cobalt	5.5		0.28	0.063	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Copper	10		0.55	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Iron	15000	B	11	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Lead	7.2		0.28	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Magnesium	2000		5.5	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Manganese	480		0.55	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Nickel	14	B	0.55	0.15	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Potassium	680		28	4.5	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Selenium	0.50	J	0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Sodium	170		55	7.3	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Thallium	1.3		0.55	0.27	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Vanadium	24		0.28	0.081	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1
Zinc	30		1.1	0.35	mg/Kg	☼	12/02/16 09:27	12/03/16 00:54	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.32	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:22	1
Boron	0.057	J	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:22	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B08 (0-4)**

**Lab Sample ID: 500-120792-11**

**Date Collected: 11/30/16 16:20**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Manganese	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 08:13	12/05/16 17:22	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/05/16 08:13	12/05/16 17:22	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 08:13	12/06/16 16:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 08:13	12/06/16 16:25	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:52	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0096	mg/Kg	☼	12/02/16 14:45	12/05/16 11:49	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU	-		12/02/16 19:44	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B07 (0-4)**

**Lab Sample ID: 500-120792-12**

**Date Collected: 11/30/16 16:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.4**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	12/01/16 16:55	12/07/16 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/01/16 16:55	12/07/16 13:41	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 13:41	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/01/16 16:55	12/07/16 13:41	1
Toluene-d8 (Surr)	106		75 - 123	12/01/16 16:55	12/07/16 13:41	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B07 (0-4)**

**Lab Sample ID: 500-120792-12**

**Date Collected: 11/30/16 16:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachlorocyclopentadiene	<0.75 *		0.75	0.21	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B07 (0-4)**

**Lab Sample ID: 500-120792-12**

**Date Collected: 11/30/16 16:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		40 - 130	12/08/16 07:23	12/09/16 18:35	1
Phenol-d5	84		36 - 123	12/08/16 07:23	12/09/16 18:35	1
Nitrobenzene-d5	76		33 - 124	12/08/16 07:23	12/09/16 18:35	1
2-Fluorobiphenyl	66		42 - 115	12/08/16 07:23	12/09/16 18:35	1
2,4,6-Tribromophenol	39		25 - 130	12/08/16 07:23	12/09/16 18:35	1
Terphenyl-d14	75		25 - 150	12/08/16 07:23	12/09/16 18:35	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Arsenic</b>	<b>2.3</b>		0.53	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Barium</b>	<b>74</b>		0.53	0.097	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Beryllium</b>	<b>0.47</b>		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Boron</b>	<b>1.8 J</b>		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Cadmium</b>	<b>0.23</b>		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Calcium</b>	<b>4000 B</b>		11	3.4	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Chromium</b>	<b>9.6 B</b>		0.53	0.092	mg/Kg	☼	12/02/16 09:27	12/03/16 23:10	1
<b>Cobalt</b>	<b>4.4</b>		0.27	0.060	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Copper</b>	<b>9.4</b>		0.53	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Iron</b>	<b>11000 B</b>		11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Lead</b>	<b>7.1</b>		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Magnesium</b>	<b>2200</b>		5.3	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Manganese</b>	<b>310</b>		0.53	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Nickel</b>	<b>11 B</b>		0.53	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Potassium</b>	<b>600</b>		27	4.3	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Selenium</b>	<b>0.35 J</b>		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Sodium</b>	<b>180</b>		53	7.0	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Thallium</b>	<b>0.79</b>		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Vanadium</b>	<b>13</b>		0.27	0.078	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1
<b>Zinc</b>	<b>33</b>		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 01:00	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.32 J</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:27	1
<b>Boron</b>	<b>0.093 J</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:27	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B07 (0-4)**

**Lab Sample ID: 500-120792-12**

**Date Collected: 11/30/16 16:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.4**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:27	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:27	1
<b>Manganese</b>	<b>0.024</b>	<b>J</b>	0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:27	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:27	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:27	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:29	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:54	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.019</b>		0.019	0.010	mg/Kg	☼	12/02/16 14:45	12/05/16 11:52	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.3</b>		0.2	0.2	SU			12/02/16 19:51	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B06 (0-4)**

**Lab Sample ID: 500-120792-13**

**Date Collected: 11/30/16 16:45**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Vinyl acetate	<0.0042		0.0042	0.0014	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/01/16 16:55	12/07/16 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120	12/01/16 16:55	12/07/16 14:06	1
Dibromofluoromethane	110		75 - 120	12/01/16 16:55	12/07/16 14:06	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/01/16 16:55	12/07/16 14:06	1
Toluene-d8 (Surr)	104		75 - 123	12/01/16 16:55	12/07/16 14:06	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B06 (0-4)**

**Lab Sample ID: 500-120792-13**

**Date Collected: 11/30/16 16:45**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Phenanthrene</b>	<b>0.013</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Fluoranthene</b>	<b>0.022</b>	<b>J</b>	0.038	0.0070	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Pyrene</b>	<b>0.020</b>	<b>J</b>	0.038	0.0075	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Benzo[a]anthracene</b>	<b>0.016</b>	<b>J</b>	0.038	0.0051	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B06 (0-4)**

**Lab Sample ID: 500-120792-13**

**Date Collected: 11/30/16 16:45**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.014</b>	<b>J</b>	0.038	0.010	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Benzo[b]fluoranthene</b>	<b>0.029</b>	<b>J</b>	0.038	0.0082	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Benzo[a]pyrene</b>	<b>0.020</b>	<b>J</b>	0.038	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.013</b>	<b>J</b>	0.038	0.0098	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0077</b>	<b>J</b>	0.038	0.0073	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:23	12/09/16 19:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	100		40 - 130				12/08/16 07:23	12/09/16 19:01	1
Phenol-d5	109		36 - 123				12/08/16 07:23	12/09/16 19:01	1
Nitrobenzene-d5	95		33 - 124				12/08/16 07:23	12/09/16 19:01	1
2-Fluorobiphenyl	82		42 - 115				12/08/16 07:23	12/09/16 19:01	1
2,4,6-Tribromophenol	51		25 - 130				12/08/16 07:23	12/09/16 19:01	1
Terphenyl-d14	94		25 - 150				12/08/16 07:23	12/09/16 19:01	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.23</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Arsenic</b>	<b>2.6</b>		0.53	0.25	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Barium</b>	<b>70</b>		0.53	0.098	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Beryllium</b>	<b>0.48</b>		0.21	0.046	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Boron</b>	<b>3.2</b>		2.7	0.37	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Cadmium</b>	<b>0.21</b>		0.11	0.031	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Calcium</b>	<b>6400</b>	<b>B</b>	11	3.4	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Chromium</b>	<b>10</b>	<b>B</b>	0.53	0.092	mg/Kg	☼	12/02/16 09:27	12/03/16 23:15	1
<b>Cobalt</b>	<b>4.6</b>		0.27	0.060	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Copper</b>	<b>9.9</b>		0.53	0.12	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Iron</b>	<b>13000</b>	<b>B</b>	11	4.1	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Lead</b>	<b>11</b>		0.27	0.13	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Magnesium</b>	<b>3200</b>		5.3	2.2	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Manganese</b>	<b>330</b>		0.53	0.11	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Nickel</b>	<b>11</b>	<b>B</b>	0.53	0.14	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Potassium</b>	<b>770</b>		27	4.4	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Selenium</b>	<b>0.45</b>	<b>J</b>	0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Sodium</b>	<b>740</b>		53	7.0	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Thallium</b>	<b>0.96</b>		0.53	0.26	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Vanadium</b>	<b>15</b>		0.27	0.078	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1
<b>Zinc</b>	<b>36</b>		1.1	0.34	mg/Kg	☼	12/02/16 09:27	12/03/16 01:07	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.66</b>		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 17:32	1
<b>Boron</b>	<b>0.089</b>	<b>J</b>	0.50	0.050	mg/L		12/05/16 08:13	12/05/16 17:32	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B06 (0-4)**

**Lab Sample ID: 500-120792-13**

**Date Collected: 11/30/16 16:45**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 17:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 17:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 17:32	1
<b>Manganese</b>	<b>0.33</b>		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 17:32	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 17:32	1
<b>Zinc</b>	<b>0.024</b>	<b>J B</b>	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 17:32	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.48</b>	<b>F1</b>	0.025	0.010	mg/L		12/05/16 08:18	12/06/16 03:33	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 16:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 16:32	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:55	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.032</b>		0.019	0.0098	mg/Kg	☼	12/02/16 14:45	12/05/16 11:54	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.7</b>		0.2	0.2	SU			12/02/16 19:58	1

# Definitions/Glossary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit

## 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: 500-120792-1

## GC/MS VOA

### Prep Batch: 363266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	5035	
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	5035	
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	5035	
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	5035	
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	5035	
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	5035	
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	5035	
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	5035	
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	5035	
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	5035	
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	5035	
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	5035	
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	5035	

### Analysis Batch: 363734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	8260B	363266
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	8260B	363266
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	8260B	363266
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	8260B	363266
MB 500-363734/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-363734/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363734/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 363815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	8260B	363266
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	8260B	363266
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	8260B	363266
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	8260B	363266
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	8260B	363266
MB 500-363815/4	Method Blank	Total/NA	Solid	8260B	
LCS 500-363815/3	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 363909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	8260B	363266
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	8260B	363266
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	8260B	363266
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	8260B	363266
MB 500-363909/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-363909/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363909/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 364109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	3541	
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	3541	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 364109 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	3541	
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	3541	
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	3541	
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	3541	
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	3541	
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	3541	
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	3541	
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	3541	
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	3541	
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	3541	
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	3541	
MB 500-364109/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-364109/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-120792-1 MS	1314V3-66-B01 (0-7)	Total/NA	Solid	3541	
500-120792-1 MSD	1314V3-66-B01 (0-7)	Total/NA	Solid	3541	

### Analysis Batch: 364379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	8270D	364109
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	8270D	364109
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	8270D	364109
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	8270D	364109
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	8270D	364109
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	8270D	364109
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	8270D	364109
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	8270D	364109
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	8270D	364109
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	8270D	364109
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	8270D	364109
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	8270D	364109
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	8270D	364109
MB 500-364109/1-A	Method Blank	Total/NA	Solid	8270D	364109
LCS 500-364109/2-A	Lab Control Sample	Total/NA	Solid	8270D	364109
500-120792-1 MS	1314V3-66-B01 (0-7)	Total/NA	Solid	8270D	364109
500-120792-1 MSD	1314V3-66-B01 (0-7)	Total/NA	Solid	8270D	364109

## Metals

### Prep Batch: 363316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	3050B	
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	3050B	
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	3050B	
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	3050B	
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	3050B	
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	3050B	
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	3050B	
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	3050B	
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	3050B	
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	3050B	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Metals (Continued)

### Prep Batch: 363316 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	3050B	
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	3050B	
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	3050B	
MB 500-363316/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-363316/2-A	Lab Control Sample	Total/NA	Solid	3050B	

### Leach Batch: 363356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	SPLP East	Solid	1312	
500-120792-2	1314V3-66-B01 (0-7)D	SPLP East	Solid	1312	
500-120792-4	1314V3-67-B04 (0-7)	SPLP East	Solid	1312	
500-120792-5	1314V3-67-B04 (7-13)	SPLP East	Solid	1312	
500-120792-6	1314V3-67-B05 (0-6)	SPLP East	Solid	1312	
500-120792-7	1314V3-67-B03 (0-4)	SPLP East	Solid	1312	
500-120792-9	1314V3-67-B01 (0-5)	SPLP East	Solid	1312	
500-120792-10	1314V3-67-B01 (5-9)	SPLP East	Solid	1312	
500-120792-13	1314V3-67-B06 (0-4)	SPLP East	Solid	1312	
LB 500-363356/1-B	Method Blank	SPLP East	Solid	1312	
500-120792-13 MS	1314V3-67-B06 (0-4)	SPLP East	Solid	1312	
500-120792-13 DU	1314V3-67-B06 (0-4)	SPLP East	Solid	1312	

### Leach Batch: 363370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	TCLP	Solid	1311	
500-120792-2	1314V3-66-B01 (0-7)D	TCLP	Solid	1311	
500-120792-3	1314V3-66-B02 (0-6)	TCLP	Solid	1311	
500-120792-4	1314V3-67-B04 (0-7)	TCLP	Solid	1311	
500-120792-5	1314V3-67-B04 (7-13)	TCLP	Solid	1311	
500-120792-6	1314V3-67-B05 (0-6)	TCLP	Solid	1311	
500-120792-7	1314V3-67-B03 (0-4)	TCLP	Solid	1311	
500-120792-8	1314V3-67-B02 (0-6)	TCLP	Solid	1311	
500-120792-9	1314V3-67-B01 (0-5)	TCLP	Solid	1311	
500-120792-10	1314V3-67-B01 (5-9)	TCLP	Solid	1311	
500-120792-11	1314V3-67-B08 (0-4)	TCLP	Solid	1311	
500-120792-12	1314V3-67-B07 (0-4)	TCLP	Solid	1311	
500-120792-13	1314V3-67-B06 (0-4)	TCLP	Solid	1311	
LB 500-363370/1-B	Method Blank	TCLP	Solid	1311	
LB 500-363370/1-C	Method Blank	TCLP	Solid	1311	
500-120792-1 MS	1314V3-66-B01 (0-7)	TCLP	Solid	1311	
500-120792-1 DU	1314V3-66-B01 (0-7)	TCLP	Solid	1311	

### Prep Batch: 363371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	7471B	
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	7471B	
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	7471B	
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	7471B	
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	7471B	
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	7471B	
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	7471B	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Metals (Continued)

### Prep Batch: 363371 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	7471B	
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	7471B	
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	7471B	
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	7471B	
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	7471B	
MB 500-363371/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-363371/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-120792-1 MS	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	
500-120792-1 MSD	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	
500-120792-1 DU	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	

### Analysis Batch: 363473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	6010B	363316
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	6010B	363316
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	6010B	363316
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	6010B	363316
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	6010B	363316
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	6010B	363316
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	6010B	363316
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	6010B	363316
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	6010B	363316
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	6010B	363316
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	6010B	363316
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	6010B	363316
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	6010B	363316
MB 500-363316/1-A	Method Blank	Total/NA	Solid	6010B	363316
LCS 500-363316/2-A	Lab Control Sample	Total/NA	Solid	6010B	363316

### Analysis Batch: 363546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	6010B	363316
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	6010B	363316
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	6010B	363316
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	6010B	363316
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	6010B	363316
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	6010B	363316
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	6010B	363316
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	6010B	363316
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	6010B	363316
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	6010B	363316
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	6010B	363316
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	6010B	363316
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	6010B	363316
MB 500-363316/1-A	Method Blank	Total/NA	Solid	6010B	363316
LCS 500-363316/2-A	Lab Control Sample	Total/NA	Solid	6010B	363316

### Prep Batch: 363556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	TCLP	Solid	3010A	363370
500-120792-2	1314V3-66-B01 (0-7)D	TCLP	Solid	3010A	363370

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Metals (Continued)

### Prep Batch: 363556 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-3	1314V3-66-B02 (0-6)	TCLP	Solid	3010A	363370
500-120792-4	1314V3-67-B04 (0-7)	TCLP	Solid	3010A	363370
500-120792-5	1314V3-67-B04 (7-13)	TCLP	Solid	3010A	363370
500-120792-6	1314V3-67-B05 (0-6)	TCLP	Solid	3010A	363370
500-120792-7	1314V3-67-B03 (0-4)	TCLP	Solid	3010A	363370
500-120792-8	1314V3-67-B02 (0-6)	TCLP	Solid	3010A	363370
500-120792-9	1314V3-67-B01 (0-5)	TCLP	Solid	3010A	363370
500-120792-10	1314V3-67-B01 (5-9)	TCLP	Solid	3010A	363370
500-120792-11	1314V3-67-B08 (0-4)	TCLP	Solid	3010A	363370
500-120792-12	1314V3-67-B07 (0-4)	TCLP	Solid	3010A	363370
500-120792-13	1314V3-67-B06 (0-4)	TCLP	Solid	3010A	363370
LB 500-363370/1-B	Method Blank	TCLP	Solid	3010A	363370
LCS 500-363556/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Prep Batch: 363559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	SPLP East	Solid	3010A	363356
500-120792-2	1314V3-66-B01 (0-7)D	SPLP East	Solid	3010A	363356
500-120792-4	1314V3-67-B04 (0-7)	SPLP East	Solid	3010A	363356
500-120792-5	1314V3-67-B04 (7-13)	SPLP East	Solid	3010A	363356
500-120792-6	1314V3-67-B05 (0-6)	SPLP East	Solid	3010A	363356
500-120792-7	1314V3-67-B03 (0-4)	SPLP East	Solid	3010A	363356
500-120792-9	1314V3-67-B01 (0-5)	SPLP East	Solid	3010A	363356
500-120792-10	1314V3-67-B01 (5-9)	SPLP East	Solid	3010A	363356
500-120792-13	1314V3-67-B06 (0-4)	SPLP East	Solid	3010A	363356
LB 500-363356/1-B	Method Blank	SPLP East	Solid	3010A	363356
LCS 500-363559/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-120792-13 MS	1314V3-67-B06 (0-4)	SPLP East	Solid	3010A	363356
500-120792-13 DU	1314V3-67-B06 (0-4)	SPLP East	Solid	3010A	363356

### Analysis Batch: 363653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	363371
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	7471B	363371
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	7471B	363371
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	7471B	363371
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	7471B	363371
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	7471B	363371
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	7471B	363371
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	7471B	363371
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	7471B	363371
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	7471B	363371
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	7471B	363371
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	7471B	363371
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	7471B	363371
MB 500-363371/12-A	Method Blank	Total/NA	Solid	7471B	363371
LCS 500-363371/13-A	Lab Control Sample	Total/NA	Solid	7471B	363371
500-120792-1 MS	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	363371
500-120792-1 MSD	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	363371
500-120792-1 DU	1314V3-66-B01 (0-7)	Total/NA	Solid	7471B	363371

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Metals (Continued)

### Prep Batch: 363703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	TCLP	Solid	7470A	363370
500-120792-2	1314V3-66-B01 (0-7)D	TCLP	Solid	7470A	363370
500-120792-3	1314V3-66-B02 (0-6)	TCLP	Solid	7470A	363370
500-120792-4	1314V3-67-B04 (0-7)	TCLP	Solid	7470A	363370
500-120792-5	1314V3-67-B04 (7-13)	TCLP	Solid	7470A	363370
500-120792-6	1314V3-67-B05 (0-6)	TCLP	Solid	7470A	363370
500-120792-7	1314V3-67-B03 (0-4)	TCLP	Solid	7470A	363370
500-120792-8	1314V3-67-B02 (0-6)	TCLP	Solid	7470A	363370
500-120792-9	1314V3-67-B01 (0-5)	TCLP	Solid	7470A	363370
500-120792-10	1314V3-67-B01 (5-9)	TCLP	Solid	7470A	363370
500-120792-11	1314V3-67-B08 (0-4)	TCLP	Solid	7470A	363370
500-120792-12	1314V3-67-B07 (0-4)	TCLP	Solid	7470A	363370
500-120792-13	1314V3-67-B06 (0-4)	TCLP	Solid	7470A	363370
LB 500-363370/1-C	Method Blank	TCLP	Solid	7470A	363370
MB 500-363703/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-363703/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-120792-1 MS	1314V3-66-B01 (0-7)	TCLP	Solid	7470A	363370
500-120792-1 DU	1314V3-66-B01 (0-7)	TCLP	Solid	7470A	363370

### Analysis Batch: 363731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	TCLP	Solid	6010B	363556
500-120792-2	1314V3-66-B01 (0-7)D	TCLP	Solid	6010B	363556
500-120792-3	1314V3-66-B02 (0-6)	TCLP	Solid	6010B	363556
500-120792-4	1314V3-67-B04 (0-7)	TCLP	Solid	6010B	363556
500-120792-5	1314V3-67-B04 (7-13)	TCLP	Solid	6010B	363556
500-120792-6	1314V3-67-B05 (0-6)	TCLP	Solid	6010B	363556
500-120792-7	1314V3-67-B03 (0-4)	TCLP	Solid	6010B	363556
500-120792-8	1314V3-67-B02 (0-6)	TCLP	Solid	6010B	363556
500-120792-9	1314V3-67-B01 (0-5)	TCLP	Solid	6010B	363556
500-120792-10	1314V3-67-B01 (5-9)	TCLP	Solid	6010B	363556
500-120792-11	1314V3-67-B08 (0-4)	TCLP	Solid	6010B	363556
500-120792-12	1314V3-67-B07 (0-4)	TCLP	Solid	6010B	363556
500-120792-13	1314V3-67-B06 (0-4)	TCLP	Solid	6010B	363556
LB 500-363370/1-B	Method Blank	TCLP	Solid	6010B	363556
LCS 500-363556/2-A	Lab Control Sample	Total/NA	Solid	6010B	363556

### Analysis Batch: 363732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	SPLP East	Solid	6010B	363559
500-120792-2	1314V3-66-B01 (0-7)D	SPLP East	Solid	6010B	363559
500-120792-4	1314V3-67-B04 (0-7)	SPLP East	Solid	6010B	363559
500-120792-5	1314V3-67-B04 (7-13)	SPLP East	Solid	6010B	363559
500-120792-6	1314V3-67-B05 (0-6)	SPLP East	Solid	6010B	363559
500-120792-7	1314V3-67-B03 (0-4)	SPLP East	Solid	6010B	363559
500-120792-9	1314V3-67-B01 (0-5)	SPLP East	Solid	6010B	363559
500-120792-10	1314V3-67-B01 (5-9)	SPLP East	Solid	6010B	363559
500-120792-13	1314V3-67-B06 (0-4)	SPLP East	Solid	6010B	363559
LB 500-363356/1-B	Method Blank	SPLP East	Solid	6010B	363559
LCS 500-363559/2-A	Lab Control Sample	Total/NA	Solid	6010B	363559
500-120792-13 MS	1314V3-67-B06 (0-4)	SPLP East	Solid	6010B	363559

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Metals (Continued)

### Analysis Batch: 363732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-13 DU	1314V3-67-B06 (0-4)	SPLP East	Solid	6010B	363559

### Analysis Batch: 363785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	TCLP	Solid	7470A	363703
500-120792-2	1314V3-66-B01 (0-7)D	TCLP	Solid	7470A	363703
500-120792-3	1314V3-66-B02 (0-6)	TCLP	Solid	7470A	363703
500-120792-4	1314V3-67-B04 (0-7)	TCLP	Solid	7470A	363703
500-120792-5	1314V3-67-B04 (7-13)	TCLP	Solid	7470A	363703
500-120792-6	1314V3-67-B05 (0-6)	TCLP	Solid	7470A	363703
500-120792-7	1314V3-67-B03 (0-4)	TCLP	Solid	7470A	363703
500-120792-8	1314V3-67-B02 (0-6)	TCLP	Solid	7470A	363703
500-120792-9	1314V3-67-B01 (0-5)	TCLP	Solid	7470A	363703
500-120792-10	1314V3-67-B01 (5-9)	TCLP	Solid	7470A	363703
500-120792-11	1314V3-67-B08 (0-4)	TCLP	Solid	7470A	363703
500-120792-12	1314V3-67-B07 (0-4)	TCLP	Solid	7470A	363703
500-120792-13	1314V3-67-B06 (0-4)	TCLP	Solid	7470A	363703
LB 500-363370/1-C	Method Blank	TCLP	Solid	7470A	363703
MB 500-363703/12-A	Method Blank	Total/NA	Solid	7470A	363703
LCS 500-363703/13-A	Lab Control Sample	Total/NA	Solid	7470A	363703
500-120792-1 MS	1314V3-66-B01 (0-7)	TCLP	Solid	7470A	363703
500-120792-1 DU	1314V3-66-B01 (0-7)	TCLP	Solid	7470A	363703

### Analysis Batch: 363952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	TCLP	Solid	6020A	363556
500-120792-2	1314V3-66-B01 (0-7)D	TCLP	Solid	6020A	363556
500-120792-3	1314V3-66-B02 (0-6)	TCLP	Solid	6020A	363556
500-120792-4	1314V3-67-B04 (0-7)	TCLP	Solid	6020A	363556
500-120792-5	1314V3-67-B04 (7-13)	TCLP	Solid	6020A	363556
500-120792-6	1314V3-67-B05 (0-6)	TCLP	Solid	6020A	363556
500-120792-7	1314V3-67-B03 (0-4)	TCLP	Solid	6020A	363556
500-120792-8	1314V3-67-B02 (0-6)	TCLP	Solid	6020A	363556
500-120792-9	1314V3-67-B01 (0-5)	TCLP	Solid	6020A	363556
500-120792-10	1314V3-67-B01 (5-9)	TCLP	Solid	6020A	363556
500-120792-11	1314V3-67-B08 (0-4)	TCLP	Solid	6020A	363556
500-120792-12	1314V3-67-B07 (0-4)	TCLP	Solid	6020A	363556
500-120792-13	1314V3-67-B06 (0-4)	TCLP	Solid	6020A	363556
LB 500-363370/1-B	Method Blank	TCLP	Solid	6020A	363556
LCS 500-363556/2-A	Lab Control Sample	Total/NA	Solid	6020A	363556

## General Chemistry

### Analysis Batch: 363190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	Moisture	
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	Moisture	
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	Moisture	
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	Moisture	
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## General Chemistry (Continued)

### Analysis Batch: 363190 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	Moisture	
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	Moisture	
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	Moisture	
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	Moisture	
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	Moisture	
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	Moisture	
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	Moisture	
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	Moisture	
500-120792-1 DU	1314V3-66-B01 (0-7)	Total/NA	Solid	Moisture	

### Analysis Batch: 363480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120792-1	1314V3-66-B01 (0-7)	Total/NA	Solid	9045D	
500-120792-2	1314V3-66-B01 (0-7)D	Total/NA	Solid	9045D	
500-120792-3	1314V3-66-B02 (0-6)	Total/NA	Solid	9045D	
500-120792-4	1314V3-67-B04 (0-7)	Total/NA	Solid	9045D	
500-120792-5	1314V3-67-B04 (7-13)	Total/NA	Solid	9045D	
500-120792-6	1314V3-67-B05 (0-6)	Total/NA	Solid	9045D	
500-120792-7	1314V3-67-B03 (0-4)	Total/NA	Solid	9045D	
500-120792-8	1314V3-67-B02 (0-6)	Total/NA	Solid	9045D	
500-120792-9	1314V3-67-B01 (0-5)	Total/NA	Solid	9045D	
500-120792-10	1314V3-67-B01 (5-9)	Total/NA	Solid	9045D	
500-120792-11	1314V3-67-B08 (0-4)	Total/NA	Solid	9045D	
500-120792-12	1314V3-67-B07 (0-4)	Total/NA	Solid	9045D	
500-120792-13	1314V3-67-B06 (0-4)	Total/NA	Solid	9045D	
500-120792-10 DU	1314V3-67-B01 (5-9)	Total/NA	Solid	9045D	

# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	12DCE	TOL
		(70-120)	(75-120)	(69-134)	(75-123)
500-120792-1	1314V3-66-B01 (0-7)	100	108	105	105
500-120792-2	1314V3-66-B01 (0-7)D	101	110	103	107
500-120792-3	1314V3-66-B02 (0-6)	95	107	96	105
500-120792-4	1314V3-67-B04 (0-7)	103	111	106	107
500-120792-5	1314V3-67-B04 (7-13)	97	108	105	105
500-120792-6	1314V3-67-B05 (0-6)	99	110	113	106
500-120792-7	1314V3-67-B03 (0-4)	98	107	105	105
500-120792-8	1314V3-67-B02 (0-6)	102	106	105	104
500-120792-9	1314V3-67-B01 (0-5)	98	109	106	107
500-120792-10	1314V3-67-B01 (5-9)	97	108	106	106
500-120792-11	1314V3-67-B08 (0-4)	97	110	104	105
500-120792-12	1314V3-67-B07 (0-4)	99	110	108	106
500-120792-13	1314V3-67-B06 (0-4)	99	110	109	104
LCS 500-363734/5	Lab Control Sample	101	103	96	111
LCS 500-363815/3	Lab Control Sample	104	103	101	109
LCS 500-363909/4	Lab Control Sample	103	103	99	107
LCSD 500-363734/6	Lab Control Sample Dup	105	105	99	109
LCSD 500-363909/5	Lab Control Sample Dup	101	105	99	107
MB 500-363734/7	Method Blank	102	106	101	106
MB 500-363815/4	Method Blank	99	105	98	103
MB 500-363909/6	Method Blank	102	104	103	106

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPH
		(40-130)	(36-123)	(33-124)	(42-115)	(25-130)	(25-150)
500-120792-1	1314V3-66-B01 (0-7)	113	124 X	108	92	86	103
500-120792-1 MS	1314V3-66-B01 (0-7)	95	104	92	77	73	115
500-120792-1 MSD	1314V3-66-B01 (0-7)	87	96	84	72	56	110
500-120792-2	1314V3-66-B01 (0-7)D	90	98	85	74	69	80
500-120792-3	1314V3-66-B02 (0-6)	108	118	103	88	87	100
500-120792-4	1314V3-67-B04 (0-7)	88	96	83	73	56	80
500-120792-5	1314V3-67-B04 (7-13)	108	117	98	85	63	94
500-120792-6	1314V3-67-B05 (0-6)	102	114	98	83	54	94
500-120792-7	1314V3-67-B03 (0-4)	102	111	98	85	44	94
500-120792-8	1314V3-67-B02 (0-6)	79	86	74	65	35	76
500-120792-9	1314V3-67-B01 (0-5)	97	106	94	81	52	90
500-120792-10	1314V3-67-B01 (5-9)	98	106	93	81	47	89
500-120792-11	1314V3-67-B08 (0-4)	104	114	100	86	58	96
500-120792-12	1314V3-67-B07 (0-4)	78	84	76	66	39	75
500-120792-13	1314V3-67-B06 (0-4)	100	109	95	82	51	94

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# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

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)
LCS 500-364109/2-A	Lab Control Sample	98	102	94	78	82	86
MB 500-364109/1-A	Method Blank	105	114	99	86	77	92

### 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: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-363734/7**

**Matrix: Solid**

**Analysis Batch: 363734**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/16 10:09	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 10:09	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/16 10:09	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 10:09	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/16 10:09	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/16 10:09	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/16 10:09	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 10:09	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/16 10:09	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 10:09	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 10:09	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 10:09	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/16 10:09	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 10:09	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/16 10:09	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 10:09	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 10:09	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 10:09	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/16 10:09	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 10:09	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/16 10:09	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 10:09	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 10:09	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 10:09	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/16 10:09	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 10:09	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/16 10:09	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 10:09	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 10:09	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 10:09	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 10:09	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/16 10:09	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/16 10:09	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 10:09	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/16 10:09	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 10:09	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/16 10:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120		12/06/16 10:09	1
Dibromofluoromethane	106		75 - 120		12/06/16 10:09	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134		12/06/16 10:09	1
Toluene-d8 (Surr)	106		75 - 123		12/06/16 10:09	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363734/5**

**Matrix: Solid**

**Analysis Batch: 363734**

**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	0.0480		mg/Kg		96	40 - 148
Benzene	0.0500	0.0498		mg/Kg		100	70 - 120
Bromodichloromethane	0.0500	0.0474		mg/Kg		95	67 - 120
Bromoform	0.0500	0.0478		mg/Kg		96	50 - 129
Bromomethane	0.0500	0.0452		mg/Kg		90	50 - 134
2-Butanone (MEK)	0.0500	0.0538		mg/Kg		108	47 - 138
Carbon disulfide	0.0500	0.0482		mg/Kg		96	67 - 133
Carbon tetrachloride	0.0500	0.0465		mg/Kg		93	65 - 123
Chlorobenzene	0.0500	0.0496		mg/Kg		99	70 - 120
Chloroethane	0.0500	0.0425		mg/Kg		85	40 - 150
Chloroform	0.0500	0.0485		mg/Kg		97	70 - 120
Chloromethane	0.0500	0.0576		mg/Kg		115	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0495		mg/Kg		99	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0505		mg/Kg		101	70 - 120
Dibromochloromethane	0.0500	0.0489		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0505		mg/Kg		101	70 - 125
1,2-Dichloroethane	0.0500	0.0484		mg/Kg		97	65 - 126
1,1-Dichloroethene	0.0500	0.0487		mg/Kg		97	70 - 122
1,2-Dichloropropane	0.0500	0.0524		mg/Kg		105	70 - 126
Ethylbenzene	0.0500	0.0486		mg/Kg		97	70 - 120
2-Hexanone	0.0500	0.0530		mg/Kg		106	51 - 139
Methylene Chloride	0.0500	0.0488		mg/Kg		98	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0522		mg/Kg		104	51 - 141
Methyl tert-butyl ether	0.0500	0.0482		mg/Kg		96	70 - 121
Styrene	0.0500	0.0520		mg/Kg		104	70 - 121
1,1,2,2-Tetrachloroethane	0.0500	0.0487		mg/Kg		97	70 - 125
Tetrachloroethene	0.0500	0.0483		mg/Kg		97	70 - 122
Toluene	0.0500	0.0491		mg/Kg		98	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0484		mg/Kg		97	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0489		mg/Kg		98	70 - 121
1,1,1-Trichloroethane	0.0500	0.0474		mg/Kg		95	70 - 120
1,1,2-Trichloroethane	0.0500	0.0496		mg/Kg		99	70 - 120
Trichloroethene	0.0500	0.0480		mg/Kg		96	70 - 124
Vinyl acetate	0.0500	0.0439		mg/Kg		88	40 - 150
Vinyl chloride	0.0500	0.0526		mg/Kg		105	64 - 125
Xylenes, Total	0.100	0.100		mg/Kg		100	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane	103		75 - 120
1,2-Dichloroethane-d4 (Surr)	96		69 - 134
Toluene-d8 (Surr)	111		75 - 123



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-363734/6**

**Matrix: Solid**

**Analysis Batch: 363734**

**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	0.0512		mg/Kg		102	40 - 148	7	30
Benzene	0.0500	0.0488		mg/Kg		98	70 - 120	2	30
Bromodichloromethane	0.0500	0.0481		mg/Kg		96	67 - 120	1	30
Bromoform	0.0500	0.0497		mg/Kg		99	50 - 129	4	30
Bromomethane	0.0500	0.0440		mg/Kg		88	50 - 134	3	30
2-Butanone (MEK)	0.0500	0.0544		mg/Kg		109	47 - 138	1	30
Carbon disulfide	0.0500	0.0471		mg/Kg		94	67 - 133	2	30
Carbon tetrachloride	0.0500	0.0452		mg/Kg		90	65 - 123	3	30
Chlorobenzene	0.0500	0.0488		mg/Kg		98	70 - 120	2	30
Chloroethane	0.0500	0.0412		mg/Kg		82	40 - 150	3	30
Chloroform	0.0500	0.0492		mg/Kg		98	70 - 120	2	30
Chloromethane	0.0500	0.0564		mg/Kg		113	63 - 135	2	30
cis-1,2-Dichloroethene	0.0500	0.0489		mg/Kg		98	70 - 120	1	30
cis-1,3-Dichloropropene	0.0500	0.0506		mg/Kg		101	70 - 120	0	30
Dibromochloromethane	0.0500	0.0503		mg/Kg		101	68 - 120	3	30
1,1-Dichloroethane	0.0500	0.0498		mg/Kg		100	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0497		mg/Kg		99	65 - 126	3	30
1,1-Dichloroethene	0.0500	0.0475		mg/Kg		95	70 - 122	2	30
1,2-Dichloropropane	0.0500	0.0514		mg/Kg		103	70 - 126	2	30
Ethylbenzene	0.0500	0.0477		mg/Kg		95	70 - 120	2	30
2-Hexanone	0.0500	0.0594		mg/Kg		119	51 - 139	11	30
Methylene Chloride	0.0500	0.0491		mg/Kg		98	70 - 121	1	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0565		mg/Kg		113	51 - 141	8	30
Methyl tert-butyl ether	0.0500	0.0513		mg/Kg		103	70 - 121	6	30
Styrene	0.0500	0.0510		mg/Kg		102	70 - 121	2	30
1,1,1,2-Tetrachloroethane	0.0500	0.0508		mg/Kg		102	70 - 125	4	30
Tetrachloroethene	0.0500	0.0463		mg/Kg		93	70 - 122	4	30
Toluene	0.0500	0.0481		mg/Kg		96	70 - 121	2	30
trans-1,2-Dichloroethene	0.0500	0.0482		mg/Kg		96	70 - 120	1	30
trans-1,3-Dichloropropene	0.0500	0.0491		mg/Kg		98	70 - 121	0	30
1,1,1-Trichloroethane	0.0500	0.0470		mg/Kg		94	70 - 120	1	30
1,1,2-Trichloroethane	0.0500	0.0509		mg/Kg		102	70 - 120	3	30
Trichloroethene	0.0500	0.0479		mg/Kg		96	70 - 124	0	30
Vinyl acetate	0.0500	0.0440		mg/Kg		88	40 - 150	0	30
Vinyl chloride	0.0500	0.0516		mg/Kg		103	64 - 125	2	30
Xylenes, Total	0.100	0.0985		mg/Kg		98	70 - 123	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	105		70 - 120
Dibromofluoromethane	105		75 - 120
1,2-Dichloroethane-d4 (Surr)	99		69 - 134
Toluene-d8 (Surr)	109		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-363815/4**

**Matrix: Solid**

**Analysis Batch: 363815**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/16 21:25	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 21:25	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/16 21:25	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 21:25	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/16 21:25	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/16 21:25	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/16 21:25	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 21:25	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/16 21:25	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 21:25	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 21:25	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 21:25	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/16 21:25	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 21:25	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/16 21:25	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 21:25	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 21:25	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 21:25	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/16 21:25	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 21:25	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/16 21:25	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 21:25	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 21:25	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 21:25	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/16 21:25	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 21:25	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/16 21:25	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 21:25	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 21:25	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 21:25	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 21:25	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/16 21:25	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/16 21:25	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 21:25	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/16 21:25	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 21:25	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/16 21:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 120		12/06/16 21:25	1
Dibromofluoromethane	105		75 - 120		12/06/16 21:25	1
1,2-Dichloroethane-d4 (Surr)	98		69 - 134		12/06/16 21:25	1
Toluene-d8 (Surr)	103		75 - 123		12/06/16 21:25	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363815/3**

**Matrix: Solid**

**Analysis Batch: 363815**

**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	0.0595		mg/Kg		119	40 - 148
Benzene	0.0500	0.0486		mg/Kg		97	70 - 120
Bromodichloromethane	0.0500	0.0476		mg/Kg		95	67 - 120
Bromoform	0.0500	0.0526		mg/Kg		105	50 - 129
Bromomethane	0.0500	0.0426		mg/Kg		85	50 - 134
2-Butanone (MEK)	0.0500	0.0605		mg/Kg		121	47 - 138
Carbon disulfide	0.0500	0.0453		mg/Kg		91	67 - 133
Carbon tetrachloride	0.0500	0.0426		mg/Kg		85	65 - 123
Chlorobenzene	0.0500	0.0477		mg/Kg		95	70 - 120
Chloroethane	0.0500	0.0388		mg/Kg		78	40 - 150
Chloroform	0.0500	0.0481		mg/Kg		96	70 - 120
Chloromethane	0.0500	0.0531		mg/Kg		106	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0486		mg/Kg		97	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0494		mg/Kg		99	70 - 120
Dibromochloromethane	0.0500	0.0506		mg/Kg		101	68 - 120
1,1-Dichloroethane	0.0500	0.0475		mg/Kg		95	70 - 125
1,2-Dichloroethane	0.0500	0.0491		mg/Kg		98	65 - 126
1,1-Dichloroethene	0.0500	0.0441		mg/Kg		88	70 - 122
1,2-Dichloropropane	0.0500	0.0510		mg/Kg		102	70 - 126
Ethylbenzene	0.0500	0.0467		mg/Kg		93	70 - 120
2-Hexanone	0.0500	0.0601		mg/Kg		120	51 - 139
Methylene Chloride	0.0500	0.0493		mg/Kg		99	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0565		mg/Kg		113	51 - 141
Methyl tert-butyl ether	0.0500	0.0505		mg/Kg		101	70 - 121
Styrene	0.0500	0.0498		mg/Kg		100	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0532		mg/Kg		106	70 - 125
Tetrachloroethene	0.0500	0.0436		mg/Kg		87	70 - 122
Toluene	0.0500	0.0465		mg/Kg		93	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0451		mg/Kg		90	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0506		mg/Kg		101	70 - 121
1,1,1-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 120
1,1,2-Trichloroethane	0.0500	0.0519		mg/Kg		104	70 - 120
Trichloroethene	0.0500	0.0470		mg/Kg		94	70 - 124
Vinyl acetate	0.0500	0.0384		mg/Kg		77	40 - 150
Vinyl chloride	0.0500	0.0471		mg/Kg		94	64 - 125
Xylenes, Total	0.100	0.0953		mg/Kg		95	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 120
Dibromofluoromethane	103		75 - 120
1,2-Dichloroethane-d4 (Surr)	101		69 - 134
Toluene-d8 (Surr)	109		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-363909/6**

**Matrix: Solid**

**Analysis Batch: 363909**

**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			12/07/16 09:52	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/07/16 09:52	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/07/16 09:52	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/07/16 09:52	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/07/16 09:52	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/07/16 09:52	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/07/16 09:52	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/07/16 09:52	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/07/16 09:52	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/07/16 09:52	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 09:52	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/07/16 09:52	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/07/16 09:52	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/07/16 09:52	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/07/16 09:52	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 09:52	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/07/16 09:52	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 09:52	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/07/16 09:52	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/07/16 09:52	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/07/16 09:52	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/07/16 09:52	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/07/16 09:52	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/07/16 09:52	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/07/16 09:52	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/07/16 09:52	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/07/16 09:52	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/07/16 09:52	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/07/16 09:52	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/07/16 09:52	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/07/16 09:52	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/07/16 09:52	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/07/16 09:52	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/07/16 09:52	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/07/16 09:52	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/07/16 09:52	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/07/16 09:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120		12/07/16 09:52	1
Dibromofluoromethane	104		75 - 120		12/07/16 09:52	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134		12/07/16 09:52	1
Toluene-d8 (Surr)	106		75 - 123		12/07/16 09:52	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363909/4**

**Matrix: Solid**

**Analysis Batch: 363909**

**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	0.0543		mg/Kg		109	40 - 148
Benzene	0.0500	0.0488		mg/Kg		98	70 - 120
Bromodichloromethane	0.0500	0.0458		mg/Kg		92	67 - 120
Bromoform	0.0500	0.0503		mg/Kg		101	50 - 129
Bromomethane	0.0500	0.0434		mg/Kg		87	50 - 134
2-Butanone (MEK)	0.0500	0.0609		mg/Kg		122	47 - 138
Carbon disulfide	0.0500	0.0460		mg/Kg		92	67 - 133
Carbon tetrachloride	0.0500	0.0446		mg/Kg		89	65 - 123
Chlorobenzene	0.0500	0.0476		mg/Kg		95	70 - 120
Chloroethane	0.0500	0.0415		mg/Kg		83	40 - 150
Chloroform	0.0500	0.0471		mg/Kg		94	70 - 120
Chloromethane	0.0500	0.0550		mg/Kg		110	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0481		mg/Kg		96	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0480		mg/Kg		96	70 - 120
Dibromochloromethane	0.0500	0.0484		mg/Kg		97	68 - 120
1,1-Dichloroethane	0.0500	0.0482		mg/Kg		96	70 - 125
1,2-Dichloroethane	0.0500	0.0490		mg/Kg		98	65 - 126
1,1-Dichloroethene	0.0500	0.0473		mg/Kg		95	70 - 122
1,2-Dichloropropane	0.0500	0.0502		mg/Kg		100	70 - 126
Ethylbenzene	0.0500	0.0475		mg/Kg		95	70 - 120
2-Hexanone	0.0500	0.0601		mg/Kg		120	51 - 139
Methylene Chloride	0.0500	0.0475		mg/Kg		95	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0543		mg/Kg		109	51 - 141
Methyl tert-butyl ether	0.0500	0.0503		mg/Kg		101	70 - 121
Styrene	0.0500	0.0490		mg/Kg		98	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0529		mg/Kg		106	70 - 125
Tetrachloroethene	0.0500	0.0439		mg/Kg		88	70 - 122
Toluene	0.0500	0.0460		mg/Kg		92	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0456		mg/Kg		91	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0475		mg/Kg		95	70 - 121
1,1,1-Trichloroethane	0.0500	0.0459		mg/Kg		92	70 - 120
1,1,2-Trichloroethane	0.0500	0.0512		mg/Kg		102	70 - 120
Trichloroethene	0.0500	0.0457		mg/Kg		91	70 - 124
Vinyl acetate	0.0500	0.0573		mg/Kg		115	40 - 150
Vinyl chloride	0.0500	0.0506		mg/Kg		101	64 - 125
Xylenes, Total	0.100	0.0967		mg/Kg		97	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 120
Dibromofluoromethane	103		75 - 120
1,2-Dichloroethane-d4 (Surr)	99		69 - 134
Toluene-d8 (Surr)	107		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-363909/5**

**Matrix: Solid**

**Analysis Batch: 363909**

**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	0.0565		mg/Kg		113	40 - 148	4	30
Benzene	0.0500	0.0500		mg/Kg		100	70 - 120	3	30
Bromodichloromethane	0.0500	0.0473		mg/Kg		95	67 - 120	3	30
Bromoform	0.0500	0.0505		mg/Kg		101	50 - 129	0	30
Bromomethane	0.0500	0.0433		mg/Kg		87	50 - 134	0	30
2-Butanone (MEK)	0.0500	0.0537		mg/Kg		107	47 - 138	13	30
Carbon disulfide	0.0500	0.0484		mg/Kg		97	67 - 133	5	30
Carbon tetrachloride	0.0500	0.0458		mg/Kg		92	65 - 123	3	30
Chlorobenzene	0.0500	0.0485		mg/Kg		97	70 - 120	2	30
Chloroethane	0.0500	0.0400		mg/Kg		80	40 - 150	4	30
Chloroform	0.0500	0.0490		mg/Kg		98	70 - 120	4	30
Chloromethane	0.0500	0.0555		mg/Kg		111	63 - 135	1	30
cis-1,2-Dichloroethene	0.0500	0.0485		mg/Kg		97	70 - 120	1	30
cis-1,3-Dichloropropene	0.0500	0.0492		mg/Kg		98	70 - 120	2	30
Dibromochloromethane	0.0500	0.0495		mg/Kg		99	68 - 120	2	30
1,1-Dichloroethane	0.0500	0.0497		mg/Kg		99	70 - 125	3	30
1,2-Dichloroethane	0.0500	0.0484		mg/Kg		97	65 - 126	1	30
1,1-Dichloroethene	0.0500	0.0481		mg/Kg		96	70 - 122	2	30
1,2-Dichloropropane	0.0500	0.0539		mg/Kg		108	70 - 126	7	30
Ethylbenzene	0.0500	0.0477		mg/Kg		95	70 - 120	0	30
2-Hexanone	0.0500	0.0592		mg/Kg		118	51 - 139	1	30
Methylene Chloride	0.0500	0.0496		mg/Kg		99	70 - 121	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0578		mg/Kg		116	51 - 141	6	30
Methyl tert-butyl ether	0.0500	0.0513		mg/Kg		103	70 - 121	2	30
Styrene	0.0500	0.0506		mg/Kg		101	70 - 121	3	30
1,1,1,2-Tetrachloroethane	0.0500	0.0513		mg/Kg		103	70 - 125	3	30
Tetrachloroethene	0.0500	0.0447		mg/Kg		89	70 - 122	2	30
Toluene	0.0500	0.0482		mg/Kg		96	70 - 121	5	30
trans-1,2-Dichloroethene	0.0500	0.0496		mg/Kg		99	70 - 120	8	30
trans-1,3-Dichloropropene	0.0500	0.0502		mg/Kg		100	70 - 121	5	30
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 120	3	30
1,1,2-Trichloroethane	0.0500	0.0514		mg/Kg		103	70 - 120	0	30
Trichloroethene	0.0500	0.0487		mg/Kg		97	70 - 124	6	30
Vinyl acetate	0.0500	0.0571		mg/Kg		114	40 - 150	0	30
Vinyl chloride	0.0500	0.0497		mg/Kg		99	64 - 125	2	30
Xylenes, Total	0.100	0.0979		mg/Kg		98	70 - 123	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane	105		75 - 120
1,2-Dichloroethane-d4 (Surr)	99		69 - 134
Toluene-d8 (Surr)	107		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-364109/1-A**

**Matrix: Solid**

**Analysis Batch: 364379**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 364109**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/08/16 07:23	12/09/16 13:28	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364109/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364379**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364109**

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		12/08/16 07:23	12/09/16 13:28	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/08/16 07:23	12/09/16 13:28	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/08/16 07:23	12/09/16 13:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	105		40 - 130	12/08/16 07:23	12/09/16 13:28	1
Phenol-d5	114		36 - 123	12/08/16 07:23	12/09/16 13:28	1
Nitrobenzene-d5	99		33 - 124	12/08/16 07:23	12/09/16 13:28	1
2-Fluorobiphenyl	86		42 - 115	12/08/16 07:23	12/09/16 13:28	1
2,4,6-Tribromophenol	77		25 - 130	12/08/16 07:23	12/09/16 13:28	1
Terphenyl-d14	92		25 - 150	12/08/16 07:23	12/09/16 13:28	1

**Lab Sample ID: LCS 500-364109/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364379**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364109**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.46		mg/Kg		109	55 - 118
Bis(2-chloroethyl)ether	1.33	1.27		mg/Kg		96	53 - 116
1,3-Dichlorobenzene	1.33	1.09		mg/Kg		82	56 - 110
1,4-Dichlorobenzene	1.33	1.10		mg/Kg		83	57 - 110
1,2-Dichlorobenzene	1.33	1.08		mg/Kg		81	56 - 110
2-Methylphenol	1.33	1.24		mg/Kg		93	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.24		mg/Kg		93	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.42		mg/Kg		106	56 - 119
Hexachloroethane	1.33	1.12		mg/Kg		84	54 - 111
2-Chlorophenol	1.33	1.10		mg/Kg		83	57 - 117
Nitrobenzene	1.33	1.38		mg/Kg		104	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.31		mg/Kg		99	59 - 116
1,2,4-Trichlorobenzene	1.33	1.08		mg/Kg		81	60 - 116
Isophorone	1.33	1.18		mg/Kg		89	54 - 120
2,4-Dimethylphenol	1.33	1.04		mg/Kg		78	50 - 120
Hexachlorobutadiene	1.33	1.02		mg/Kg		76	56 - 120
Naphthalene	1.33	1.10		mg/Kg		83	58 - 116
2,4-Dichlorophenol	1.33	1.18		mg/Kg		88	61 - 116

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364109/2-A**

**Matrix: Solid**

**Analysis Batch: 364379**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 364109**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.38		mg/Kg		104	10 - 150
2,4,6-Trichlorophenol	1.33	1.04		mg/Kg		78	50 - 120
2,4,5-Trichlorophenol	1.33	1.02		mg/Kg		77	42 - 119
Hexachlorocyclopentadiene	1.33	<0.67	*	mg/Kg		5	10 - 116
2-Methylnaphthalene	1.33	1.10		mg/Kg		83	55 - 120
2-Nitroaniline	1.33	1.49		mg/Kg		112	52 - 121
2-Chloronaphthalene	1.33	1.16		mg/Kg		87	57 - 112
4-Chloro-3-methylphenol	1.33	1.33		mg/Kg		100	59 - 117
2,6-Dinitrotoluene	1.33	1.21		mg/Kg		90	57 - 118
2-Nitrophenol	1.33	1.20		mg/Kg		90	58 - 121
3-Nitroaniline	1.33	1.00		mg/Kg		75	20 - 144
Dimethyl phthalate	1.33	1.13		mg/Kg		85	60 - 112
2,4-Dinitrophenol	2.67	0.805		mg/Kg		30	10 - 110
Acenaphthylene	1.33	1.12		mg/Kg		84	57 - 116
2,4-Dinitrotoluene	1.33	1.20		mg/Kg		90	59 - 119
Acenaphthene	1.33	1.04		mg/Kg		78	52 - 113
Dibenzofuran	1.33	1.14		mg/Kg		86	59 - 110
4-Nitrophenol	2.67	1.92		mg/Kg		72	32 - 123
Fluorene	1.33	1.15		mg/Kg		86	56 - 115
4-Nitroaniline	1.33	1.85		mg/Kg		139	55 - 146
4-Bromophenyl phenyl ether	1.33	1.13		mg/Kg		84	61 - 124
Hexachlorobenzene	1.33	1.11		mg/Kg		83	62 - 126
Diethyl phthalate	1.33	1.21		mg/Kg		91	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.15		mg/Kg		86	61 - 111
Pentachlorophenol	2.67	1.14		mg/Kg		43	12 - 116
N-Nitrosodiphenylamine	1.33	1.18		mg/Kg		88	62 - 117
4,6-Dinitro-2-methylphenol	2.67	1.40		mg/Kg		53	10 - 110
Phenanthrene	1.33	1.13		mg/Kg		85	58 - 125
Anthracene	1.33	1.14		mg/Kg		86	57 - 118
Carbazole	1.33	1.38		mg/Kg		103	65 - 137
Di-n-butyl phthalate	1.33	1.19		mg/Kg		89	61 - 123
Fluoranthene	1.33	1.15		mg/Kg		86	61 - 124
Pyrene	1.33	1.13		mg/Kg		85	60 - 115
Butyl benzyl phthalate	1.33	1.23		mg/Kg		92	61 - 115
Benzo[a]anthracene	1.33	1.18		mg/Kg		88	63 - 115
Chrysene	1.33	1.11		mg/Kg		83	63 - 118
3,3'-Dichlorobenzidine	1.33	0.941		mg/Kg		71	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.30		mg/Kg		97	62 - 117
Di-n-octyl phthalate	1.33	1.31		mg/Kg		99	58 - 129
Benzo[b]fluoranthene	1.33	1.24		mg/Kg		93	61 - 123
Benzo[k]fluoranthene	1.33	1.21		mg/Kg		91	59 - 125
Benzo[a]pyrene	1.33	1.44		mg/Kg		108	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.24		mg/Kg		93	50 - 149
Dibenz(a,h)anthracene	1.33	1.24		mg/Kg		93	61 - 134
Benzo[g,h,i]perylene	1.33	1.27		mg/Kg		95	55 - 134
3 & 4 Methylphenol	1.33	1.34		mg/Kg		101	55 - 124

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364109/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364379**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364109**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	98		40 - 130
Phenol-d5	102		36 - 123
Nitrobenzene-d5	94		33 - 124
2-Fluorobiphenyl	78		42 - 115
2,4,6-Tribromophenol	82		25 - 130
Terphenyl-d14	86		25 - 150

**Lab Sample ID: 500-120792-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 364379**

**Client Sample ID: 1314V3-66-B01 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 364109**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20		1.54	1.76		mg/Kg	☼	115	55 - 118
Bis(2-chloroethyl)ether	<0.20		1.54	1.43		mg/Kg	☼	93	53 - 116
1,3-Dichlorobenzene	<0.20		1.54	1.20		mg/Kg	☼	78	56 - 110
1,4-Dichlorobenzene	<0.20		1.54	1.21		mg/Kg	☼	79	57 - 110
1,2-Dichlorobenzene	<0.20		1.54	1.20		mg/Kg	☼	78	56 - 110
2-Methylphenol	<0.20		1.54	1.44		mg/Kg	☼	94	53 - 123
2,2'-oxybis[1-chloropropane]	<0.20		1.54	1.47		mg/Kg	☼	96	22 - 133
N-Nitrosodi-n-propylamine	<0.082		1.54	1.52		mg/Kg	☼	99	56 - 119
Hexachloroethane	<0.20		1.54	1.18		mg/Kg	☼	77	54 - 111
2-Chlorophenol	<0.20		1.54	1.30		mg/Kg	☼	85	57 - 117
Nitrobenzene	<0.040		1.54	1.51		mg/Kg	☼	98	56 - 121
Bis(2-chloroethoxy)methane	<0.20		1.54	1.45		mg/Kg	☼	94	59 - 116
1,2,4-Trichlorobenzene	<0.20		1.54	1.17		mg/Kg	☼	76	60 - 116
Isophorone	<0.20		1.54	1.32		mg/Kg	☼	86	54 - 120
2,4-Dimethylphenol	<0.40		1.54	1.31		mg/Kg	☼	85	50 - 120
Hexachlorobutadiene	<0.20		1.54	1.11		mg/Kg	☼	72	56 - 120
Naphthalene	<0.040		1.54	1.23		mg/Kg	☼	80	58 - 116
2,4-Dichlorophenol	<0.40		1.54	1.34		mg/Kg	☼	87	61 - 116
4-Chloroaniline	<0.82		1.54	1.54		mg/Kg	☼	100	10 - 150
2,4,6-Trichlorophenol	<0.40		1.54	1.20		mg/Kg	☼	78	50 - 120
2,4,5-Trichlorophenol	<0.40		1.54	1.22		mg/Kg	☼	80	42 - 119
Hexachlorocyclopentadiene	<0.82	* F1	1.54	<0.77	F1	mg/Kg	☼	0	10 - 116
2-Methylnaphthalene	<0.082		1.54	1.23		mg/Kg	☼	80	55 - 120
2-Nitroaniline	<0.20		1.54	1.74		mg/Kg	☼	113	52 - 121
2-Chloronaphthalene	<0.20		1.54	1.29		mg/Kg	☼	84	57 - 112
4-Chloro-3-methylphenol	<0.40		1.54	1.59		mg/Kg	☼	103	59 - 117
2,6-Dinitrotoluene	<0.20		1.54	1.38		mg/Kg	☼	90	57 - 118
2-Nitrophenol	<0.40		1.54	1.32		mg/Kg	☼	86	58 - 121
3-Nitroaniline	<0.40		1.54	1.66		mg/Kg	☼	108	20 - 144
Dimethyl phthalate	<0.20		1.54	1.33		mg/Kg	☼	86	60 - 112
2,4-Dinitrophenol	<0.82	F1	3.08	<0.77	F1	mg/Kg	☼	0	10 - 110
Acenaphthylene	<0.040		1.54	1.26		mg/Kg	☼	82	57 - 116
2,4-Dinitrotoluene	<0.20		1.54	1.35		mg/Kg	☼	88	59 - 119
Acenaphthene	<0.040		1.54	1.18		mg/Kg	☼	76	52 - 113
Dibenzofuran	<0.20		1.54	1.29		mg/Kg	☼	84	59 - 110
4-Nitrophenol	<0.82		3.08	2.27		mg/Kg	☼	74	32 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120792-1 MS**

**Matrix: Solid**

**Analysis Batch: 364379**

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Prep Type: Total/NA**

**Prep Batch: 364109**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Fluorene	<0.040		1.54	1.32		mg/Kg	☼	86		56 - 115
4-Nitroaniline	<0.40		1.54	2.14		mg/Kg	☼	139		55 - 146
4-Bromophenyl phenyl ether	<0.20		1.54	1.34		mg/Kg	☼	87		61 - 124
Hexachlorobenzene	<0.082		1.54	1.29		mg/Kg	☼	84		62 - 126
Diethyl phthalate	<0.20		1.54	1.41		mg/Kg	☼	92		58 - 117
4-Chlorophenyl phenyl ether	<0.20		1.54	1.32		mg/Kg	☼	86		61 - 111
Pentachlorophenol	<0.82	F1	3.08	<0.77	F1	mg/Kg	☼	0		12 - 116
N-Nitrosodiphenylamine	<0.20		1.54	1.39		mg/Kg	☼	91		62 - 117
4,6-Dinitro-2-methylphenol	<0.82	F1	3.08	<0.77	F1	mg/Kg	☼	0		10 - 110
Phenanthrene	<0.040		1.54	1.34		mg/Kg	☼	87		58 - 125
Anthracene	<0.040		1.54	1.35		mg/Kg	☼	88		57 - 118
Carbazole	<0.20		1.54	1.60		mg/Kg	☼	104		65 - 137
Di-n-butyl phthalate	<0.20		1.54	1.42		mg/Kg	☼	92		61 - 123
Fluoranthene	<0.040		1.54	1.37		mg/Kg	☼	89		61 - 124
Pyrene	<0.040		1.54	1.71		mg/Kg	☼	111		60 - 115
Butyl benzyl phthalate	<0.20	F1	1.54	1.86	F1	mg/Kg	☼	121		61 - 115
Benzo[a]anthracene	<0.040		1.54	1.43		mg/Kg	☼	93		63 - 115
Chrysene	<0.040		1.54	1.32		mg/Kg	☼	86		63 - 118
3,3'-Dichlorobenzidine	<0.20		1.54	1.15		mg/Kg	☼	75		40 - 110
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.54	1.94	F1	mg/Kg	☼	126		62 - 117
Di-n-octyl phthalate	<0.20		1.54	1.31		mg/Kg	☼	85		58 - 129
Benzo[b]fluoranthene	<0.040		1.54	1.83		mg/Kg	☼	119		61 - 123
Benzo[k]fluoranthene	<0.040		1.54	1.85		mg/Kg	☼	120		59 - 125
Benzo[a]pyrene	<0.040		1.54	1.78		mg/Kg	☼	116		64 - 122
Indeno[1,2,3-cd]pyrene	<0.040		1.54	0.885		mg/Kg	☼	58		50 - 149
Dibenz(a,h)anthracene	<0.040	F1	1.54	0.911	F1	mg/Kg	☼	59		61 - 134
Benzo[g,h,i]perylene	<0.040	F1	1.54	0.725	F1	mg/Kg	☼	47		55 - 134
3 & 4 Methylphenol	<0.20		1.54	1.76		mg/Kg	☼	115		55 - 124

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	95		40 - 130
Phenol-d5	104		36 - 123
Nitrobenzene-d5	92		33 - 124
2-Fluorobiphenyl	77		42 - 115
2,4,6-Tribromophenol	73		25 - 130
Terphenyl-d14	115		25 - 150

**Lab Sample ID: 500-120792-1 MSD**

**Matrix: Solid**

**Analysis Batch: 364379**

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Prep Type: Total/NA**

**Prep Batch: 364109**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Phenol	<0.20		1.63	1.70		mg/Kg	☼	104		55 - 118	4	30
Bis(2-chloroethyl)ether	<0.20		1.63	1.35		mg/Kg	☼	83		53 - 116	6	30
1,3-Dichlorobenzene	<0.20		1.63	1.12		mg/Kg	☼	69		56 - 110	7	30
1,4-Dichlorobenzene	<0.20		1.63	1.15		mg/Kg	☼	70		57 - 110	6	30
1,2-Dichlorobenzene	<0.20		1.63	1.13		mg/Kg	☼	69		56 - 110	6	30
2-Methylphenol	<0.20		1.63	1.40		mg/Kg	☼	86		53 - 123	3	30

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120792-1 MSD**

**Matrix: Solid**

**Analysis Batch: 364379**

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Prep Type: Total/NA**

**Prep Batch: 364109**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.20		1.63	1.42		mg/Kg	☼	87	22 - 133	3	30
N-Nitrosodi-n-propylamine	<0.082		1.63	1.50		mg/Kg	☼	92	56 - 119	2	30
Hexachloroethane	<0.20		1.63	1.11		mg/Kg	☼	68	54 - 111	7	30
2-Chlorophenol	<0.20		1.63	1.26		mg/Kg	☼	77	57 - 117	4	30
Nitrobenzene	<0.040		1.63	1.46		mg/Kg	☼	89	56 - 121	4	30
Bis(2-chloroethoxy)methane	<0.20		1.63	1.38		mg/Kg	☼	84	59 - 116	5	30
1,2,4-Trichlorobenzene	<0.20		1.63	1.11		mg/Kg	☼	68	60 - 116	5	30
Isophorone	<0.20		1.63	1.27		mg/Kg	☼	78	54 - 120	4	30
2,4-Dimethylphenol	<0.40		1.63	1.26		mg/Kg	☼	77	50 - 120	4	30
Hexachlorobutadiene	<0.20		1.63	1.04		mg/Kg	☼	64	56 - 120	6	30
Naphthalene	<0.040		1.63	1.17		mg/Kg	☼	72	58 - 116	5	30
2,4-Dichlorophenol	<0.40		1.63	1.27		mg/Kg	☼	78	61 - 116	5	30
4-Chloroaniline	<0.82		1.63	1.45		mg/Kg	☼	89	10 - 150	6	30
2,4,6-Trichlorophenol	<0.40		1.63	1.13		mg/Kg	☼	69	50 - 120	6	30
2,4,5-Trichlorophenol	<0.40		1.63	1.19		mg/Kg	☼	73	42 - 119	2	30
Hexachlorocyclopentadiene	<0.82	* F1	1.63	<0.82	F1	mg/Kg	☼	0	10 - 116	NC	30
2-Methylnaphthalene	<0.082		1.63	1.16		mg/Kg	☼	71	55 - 120	5	30
2-Nitroaniline	<0.20		1.63	1.72		mg/Kg	☼	105	52 - 121	1	30
2-Chloronaphthalene	<0.20		1.63	1.25		mg/Kg	☼	77	57 - 112	3	30
4-Chloro-3-methylphenol	<0.40		1.63	1.51		mg/Kg	☼	93	59 - 117	5	30
2,6-Dinitrotoluene	<0.20		1.63	1.35		mg/Kg	☼	83	57 - 118	3	30
2-Nitrophenol	<0.40		1.63	1.24		mg/Kg	☼	76	58 - 121	7	30
3-Nitroaniline	<0.40		1.63	1.71		mg/Kg	☼	105	20 - 144	3	30
Dimethyl phthalate	<0.20		1.63	1.30		mg/Kg	☼	80	60 - 112	2	30
2,4-Dinitrophenol	<0.82	F1	3.26	<0.82	F1	mg/Kg	☼	0	10 - 110	NC	30
Acenaphthylene	<0.040		1.63	1.24		mg/Kg	☼	76	57 - 116	2	30
2,4-Dinitrotoluene	<0.20		1.63	1.33		mg/Kg	☼	82	59 - 119	1	30
Acenaphthene	<0.040		1.63	1.16		mg/Kg	☼	71	52 - 113	2	30
Dibenzofuran	<0.20		1.63	1.26		mg/Kg	☼	77	59 - 110	3	30
4-Nitrophenol	<0.82		3.26	2.02		mg/Kg	☼	62	32 - 123	12	30
Fluorene	<0.040		1.63	1.30		mg/Kg	☼	80	56 - 115	2	30
4-Nitroaniline	<0.40		1.63	2.02		mg/Kg	☼	124	55 - 146	6	30
4-Bromophenyl phenyl ether	<0.20		1.63	1.33		mg/Kg	☼	82	61 - 124	1	30
Hexachlorobenzene	<0.082		1.63	1.29		mg/Kg	☼	79	62 - 126	0	30
Diethyl phthalate	<0.20		1.63	1.41		mg/Kg	☼	86	58 - 117	0	30
4-Chlorophenyl phenyl ether	<0.20		1.63	1.29		mg/Kg	☼	79	61 - 111	2	30
Pentachlorophenol	<0.82	F1	3.26	<0.82	F1	mg/Kg	☼	0	12 - 116	NC	30
N-Nitrosodiphenylamine	<0.20		1.63	1.41		mg/Kg	☼	86	62 - 117	1	30
4,6-Dinitro-2-methylphenol	<0.82	F1	3.26	<0.82	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	<0.040		1.63	1.37		mg/Kg	☼	84	58 - 125	2	30
Anthracene	<0.040		1.63	1.38		mg/Kg	☼	84	57 - 118	2	30
Carbazole	<0.20		1.63	1.61		mg/Kg	☼	99	65 - 137	1	30
Di-n-butyl phthalate	<0.20		1.63	1.47		mg/Kg	☼	90	61 - 123	4	30
Fluoranthene	<0.040		1.63	1.37		mg/Kg	☼	84	61 - 124	1	30
Pyrene	<0.040		1.63	1.72		mg/Kg	☼	105	60 - 115	1	30
Butyl benzyl phthalate	<0.20	F1	1.63	1.88		mg/Kg	☼	115	61 - 115	1	30
Benzo[a]anthracene	<0.040		1.63	1.43		mg/Kg	☼	88	63 - 115	0	30
Chrysene	<0.040		1.63	1.31		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: 500-120792-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120792-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364379**

**Client Sample ID: 1314V3-66-B01 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 364109**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
3,3'-Dichlorobenzidine	<0.20		1.63	1.12		mg/Kg	☼	68	40 - 110	3	30
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.63	2.00	F1	mg/Kg	☼	123	62 - 117	3	30
Di-n-octyl phthalate	<0.20		1.63	1.32		mg/Kg	☼	81	58 - 129	0	30
Benzo[b]fluoranthene	<0.040		1.63	1.78		mg/Kg	☼	109	61 - 123	3	30
Benzo[k]fluoranthene	<0.040		1.63	1.81		mg/Kg	☼	111	59 - 125	2	30
Benzo[a]pyrene	<0.040		1.63	1.76		mg/Kg	☼	108	64 - 122	1	30
Indeno[1,2,3-cd]pyrene	<0.040		1.63	0.861		mg/Kg	☼	53	50 - 149	3	30
Dibenz(a,h)anthracene	<0.040	F1	1.63	0.889	F1	mg/Kg	☼	55	61 - 134	2	30
Benzo[g,h,i]perylene	<0.040	F1	1.63	0.700	F1	mg/Kg	☼	43	55 - 134	3	30
3 & 4 Methylphenol	<0.20		1.63	1.62		mg/Kg	☼	99	55 - 124	9	30
<b>MSD MSD</b>											
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
2-Fluorophenol	87		40 - 130								
Phenol-d5	96		36 - 123								
Nitrobenzene-d5	84		33 - 124								
2-Fluorobiphenyl	72		42 - 115								
2,4,6-Tribromophenol	56		25 - 130								
Terphenyl-d14	110		25 - 150								

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-363316/1-A**  
**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.42	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Barium	<1.0		1.0	0.18	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Boron	<5.0		5.0	0.70	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Calcium	7.21	J	20	6.4	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Copper	<1.0		1.0	0.22	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Iron	8.21	J	20	7.7	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Lead	<0.50		0.50	0.25	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Magnesium	<10		10	4.1	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Nickel	0.360	J	1.0	0.27	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Potassium	<50		50	8.2	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Silver	<0.50		0.50	0.12	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Sodium	<100		100	13	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/02/16 09:27	12/02/16 21:53	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/02/16 09:27	12/02/16 21:53	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-363316/1-A**  
**Matrix: Solid**  
**Analysis Batch: 363546**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.800	J	1.0	0.17	mg/Kg		12/02/16 09:27	12/03/16 21:17	1

**Lab Sample ID: LCS 500-363316/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363473**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	45.5		mg/Kg		91	80 - 120
Arsenic	10.0	9.38		mg/Kg		94	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Beryllium	5.00	4.94		mg/Kg		99	80 - 120
Boron	100	91.9		mg/Kg		92	80 - 120
Cadmium	5.00	4.75		mg/Kg		95	80 - 120
Calcium	1000	978		mg/Kg		98	80 - 120
Cobalt	50.0	47.8		mg/Kg		96	80 - 120
Copper	25.0	24.4		mg/Kg		98	80 - 120
Iron	100	107		mg/Kg		107	80 - 120
Lead	10.0	9.76		mg/Kg		98	80 - 120
Magnesium	1000	961		mg/Kg		96	80 - 120
Manganese	50.0	50.6		mg/Kg		101	80 - 120
Nickel	50.0	48.0		mg/Kg		96	80 - 120
Potassium	1000	938		mg/Kg		94	80 - 120
Selenium	10.0	8.91		mg/Kg		89	80 - 120
Silver	5.00	4.75		mg/Kg		95	80 - 120
Sodium	1000	951		mg/Kg		95	80 - 120
Thallium	10.0	9.44		mg/Kg		94	80 - 120
Vanadium	50.0	49.8		mg/Kg		100	80 - 120
Zinc	50.0	47.7		mg/Kg		95	80 - 120

**Lab Sample ID: LCS 500-363316/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363546**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363316**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chromium	20.0	19.9		mg/Kg		99	80 - 120

**Lab Sample ID: LCS 500-363556/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363556**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.523		mg/L		105	80 - 120
Beryllium	0.0500	0.0510		mg/L		102	80 - 120
Boron	1.00	0.939		mg/L		94	80 - 120
Cadmium	0.0500	0.0502		mg/L		100	80 - 120
Chromium	0.200	0.201		mg/L		101	80 - 120
Cobalt	0.500	0.508		mg/L		102	80 - 120
Iron	1.00	0.988		mg/L		99	80 - 120
Lead	0.100	0.0993		mg/L		99	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-363556/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363556**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Manganese	0.500	0.511		mg/L		102	80 - 120	
Nickel	0.500	0.506		mg/L		101	80 - 120	
Selenium	0.100	0.101		mg/L		101	80 - 120	
Silver	0.0500	0.0494		mg/L		99	80 - 120	
Zinc	0.500	0.497	J	mg/L		99	80 - 120	

**Lab Sample ID: LCS 500-363559/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363559**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Lead	0.100	0.104		mg/L		104	80 - 120	
Manganese	0.500	0.538		mg/L		108	80 - 120	

**Lab Sample ID: LB 500-363370/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363556**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 15:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 08:13	12/05/16 15:44	1
Boron	<0.50		0.50	0.050	mg/L		12/05/16 08:13	12/05/16 15:44	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 08:13	12/05/16 15:44	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 15:44	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 15:44	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 08:13	12/05/16 15:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:13	12/05/16 15:44	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 15:44	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 15:44	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 08:13	12/05/16 15:44	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 08:13	12/05/16 15:44	1
Zinc	0.0315	J	0.50	0.020	mg/L		12/05/16 08:13	12/05/16 15:44	1

**Lab Sample ID: LB 500-363356/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 363559**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 08:18	12/06/16 01:43	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 08:18	12/06/16 01:43	1

**Lab Sample ID: 500-120792-13 MS**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: 1314V3-67-B06 (0-4)**  
**Prep Type: SPLP East**  
**Prep Batch: 363559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits	
				Result	Qualifier					
Manganese	0.48	F1	0.500	1.33	F1	mg/L		170	50 - 150	

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-120792-13 DU**  
**Matrix: Solid**  
**Analysis Batch: 363732**

**Client Sample ID: 1314V3-67-B06 (0-4)**  
**Prep Type: SPLP East**  
**Prep Batch: 363559**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Manganese	0.48	F1	0.673	F3	mg/L		33	20

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: LCS 500-363556/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363952**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363556**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.483		mg/L		97	80 - 120
Thallium	0.100	0.101		mg/L		101	80 - 120

**Lab Sample ID: LB 500-363370/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363952**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363556**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 08:13	12/06/16 15:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 08:13	12/06/16 15:37	1

## Method: 7470A - TCLP Mercury

**Lab Sample ID: MB 500-363703/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363703**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:22	1

**Lab Sample ID: LCS 500-363703/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363703**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00194		mg/L		97	80 - 120

**Lab Sample ID: LB 500-363370/1-C**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363703**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:25	1

**Lab Sample ID: 500-120792-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: 1314V3-66-B01 (0-7)**  
**Prep Type: TCLP**  
**Prep Batch: 363703**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000910		mg/L		91	50 - 150

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Lab Sample ID: 500-120792-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: 1314V3-66-B01 (0-7)**  
**Prep Type: TCLP**  
**Prep Batch: 363703**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-363371/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363371**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg		12/02/16 14:45	12/05/16 11:11	1

**Lab Sample ID: LCS 500-363371/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363371**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.158		mg/Kg		95	80 - 120

**Lab Sample ID: 500-120792-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: 1314V3-66-B01 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 363371**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.021		0.0995	0.113		mg/Kg	☼	93	75 - 125

**Lab Sample ID: 500-120792-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: 1314V3-66-B01 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 363371**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.021		0.0893	0.112		mg/Kg	☼	102	75 - 125	1	20

**Lab Sample ID: 500-120792-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 363653**

**Client Sample ID: 1314V3-66-B01 (0-7)**  
**Prep Type: Total/NA**  
**Prep Batch: 363371**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.021		0.0278	F5	mg/Kg	☼	27	20

## Method: 9045D - pH

**Lab Sample ID: 500-120792-10 DU**  
**Matrix: Solid**  
**Analysis Batch: 363480**

**Client Sample ID: 1314V3-67-B01 (5-9)**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	8.2		8.2		SU		0.1	

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Lab Sample ID: 500-120792-1**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 01:56	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 16:23	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 15:44	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 11:05	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 18:26		
					(End)	12/02/16 18:33		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-66-B01 (0-7)**

**Lab Sample ID: 500-120792-1**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 18:09	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 13:54	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/02/16 23:30	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:16	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:15	MJD	TAL CHI

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 02:03	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 16:27	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 15:48	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:36	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 18:33 (End) 12/02/16 18:40	JB	TAL CHI
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-66-B01 (0-7)D**

**Lab Sample ID: 500-120792-2**

**Date Collected: 11/30/16 09:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 18:34	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 14:20	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/02/16 23:37	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:20	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 13:10	MJD	TAL CHI

**Client Sample ID: 1314V3-66-B02 (0-6)**

**Lab Sample ID: 500-120792-3**

**Date Collected: 11/30/16 09:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 16:32	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 15:51	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:38	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 18:40 (End) 12/02/16 18:47	JB	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-66-B02 (0-6)**

**Lab Sample ID: 500-120792-3**

Date Collected: 11/30/16 09:30

Matrix: Solid

Date Received: 12/01/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-66-B02 (0-6)**

**Lab Sample ID: 500-120792-3**

Date Collected: 11/30/16 09:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 18:59	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 14:45	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/02/16 23:44	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:24	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:26	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B04 (0-7)**

**Lab Sample ID: 500-120792-4**

Date Collected: 11/30/16 14:25

Matrix: Solid

Date Received: 12/01/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 02:17	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 16:37	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 15:54	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:39	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 18:47		
					(End)	12/02/16 18:54		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (0-7)**

**Lab Sample ID: 500-120792-4**

**Date Collected: 11/30/16 14:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363734	12/06/16 19:25	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 15:11	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/02/16 23:50	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:29	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:34	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B04 (7-13)**

**Lab Sample ID: 500-120792-5**

**Date Collected: 11/30/16 14:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 02:23	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 16:42	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 15:58	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:41	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 18:54 (End) 12/02/16 19:01	JBj	TAL CHI
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B04 (7-13)**

**Lab Sample ID: 500-120792-5**

**Date Collected: 11/30/16 14:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363815	12/07/16 05:02	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 15:36	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/02/16 23:57	KML	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B04 (7-13)**

**Lab Sample ID: 500-120792-5**

**Date Collected: 11/30/16 14:30**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:33	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:36	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B05 (0-6)**

**Lab Sample ID: 500-120792-6**

**Date Collected: 11/30/16 14:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 02:46	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 16:47	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:01	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:42	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 19:01		
					(End)	12/02/16 19:08		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B05 (0-6)**

**Lab Sample ID: 500-120792-6**

**Date Collected: 11/30/16 14:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363815	12/07/16 05:28	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 16:02	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 00:04	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:37	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:38	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B03 (0-4)**

**Lab Sample ID: 500-120792-7**

**Date Collected: 11/30/16 15:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 02:53	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 17:03	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:05	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:44	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBJ	TAL CHI
					(Start)	12/02/16 19:08		
					(End)	12/02/16 19:16		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B03 (0-4)**

**Lab Sample ID: 500-120792-7**

**Date Collected: 11/30/16 15:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363815	12/07/16 05:53	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 16:28	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 00:27	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:42	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:40	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B02 (0-6)**

**Lab Sample ID: 500-120792-8**

**Date Collected: 11/30/16 15:40**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 17:08	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:08	FXG	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B02 (0-6)**

**Lab Sample ID: 500-120792-8**

**Date Collected: 11/30/16 15:40**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:45	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBJ	TAL CHI
					(Start)	12/02/16 19:16		
					(End)	12/02/16 19:23		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B02 (0-6)**

**Lab Sample ID: 500-120792-8**

**Date Collected: 11/30/16 15:40**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363815	12/07/16 06:18	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 16:53	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 00:33	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:47	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:43	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B01 (0-5)**

**Lab Sample ID: 500-120792-9**

**Date Collected: 11/30/16 16:00**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 03:06	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 17:12	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:18	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:46	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBJ	TAL CHI
					(Start)	12/02/16 19:23		
					(End)	12/02/16 19:30		

TestAmerica Chicago



# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (0-5)**

**Lab Sample ID: 500-120792-9**

**Date Collected: 11/30/16 16:00**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B01 (0-5)**

**Lab Sample ID: 500-120792-9**

**Date Collected: 11/30/16 16:00**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363909	12/07/16 14:32	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 17:19	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 00:40	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 22:58	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:45	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B01 (5-9)**

**Lab Sample ID: 500-120792-10**

**Date Collected: 11/30/16 16:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 03:13	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 17:17	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:22	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:51	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 19:30		
					(End)	12/02/16 19:37		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B01 (5-9)**

**Lab Sample ID: 500-120792-10**

**Date Collected: 11/30/16 16:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 81.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363815	12/07/16 07:09	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 17:44	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 00:47	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 23:02	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:47	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B08 (0-4)**

**Lab Sample ID: 500-120792-11**

**Date Collected: 11/30/16 16:20**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 17:22	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:25	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:52	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBK	TAL CHI
					(Start)	12/02/16 19:44		
					(End)	12/02/16 19:51		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B08 (0-4)**

**Lab Sample ID: 500-120792-11**

**Date Collected: 11/30/16 16:20**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363909	12/07/16 13:16	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 18:10	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 00:54	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 23:06	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B08 (0-4)**

**Lab Sample ID: 500-120792-11**

Date Collected: 11/30/16 16:20

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	363653	12/05/16 11:49	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B07 (0-4)**

**Lab Sample ID: 500-120792-12**

Date Collected: 11/30/16 16:30

Matrix: Solid

Date Received: 12/01/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 17:27	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:29	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:54	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 19:51 (End) 12/02/16 19:58	BJJ	TAL CHI
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B07 (0-4)**

**Lab Sample ID: 500-120792-12**

Date Collected: 11/30/16 16:30

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363909	12/07/16 13:41	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 18:35	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 01:00	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 23:10	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:52	MJD	TAL CHI

**Client Sample ID: 1314V3-67-B06 (0-4)**

**Lab Sample ID: 500-120792-13**

Date Collected: 11/30/16 16:45

Matrix: Solid

Date Received: 12/01/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363356	12/02/16 10:45	RMP	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120792-1

**Client Sample ID: 1314V3-67-B06 (0-4)**

**Lab Sample ID: 500-120792-13**

**Date Collected: 11/30/16 16:45**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Prep	3010A			363559	12/05/16 08:18	JEF	TAL CHI
SPLP East	Analysis	6010B		1	363732	12/06/16 03:33	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 17:32	PJ1	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	3010A			363556	12/05/16 08:13	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 16:32	FXG	TAL CHI
TCLP	Leach	1311			363370	12/02/16 13:20	RMP	TAL CHI
TCLP	Prep	7470A			363703	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:55	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBK	TAL CHI
					(Start)	12/02/16 19:58		
					(End)	12/02/16 20:06		
Total/NA	Analysis	Moisture		1	363190	12/01/16 14:29	LWN	TAL CHI

**Client Sample ID: 1314V3-67-B06 (0-4)**

**Lab Sample ID: 500-120792-13**

**Date Collected: 11/30/16 16:45**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363266	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363909	12/07/16 14:06	BDW	TAL CHI
Total/NA	Prep	3541			364109	12/08/16 07:23	STW	TAL CHI
Total/NA	Analysis	8270D		1	364379	12/09/16 19:01	AJD	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363473	12/03/16 01:07	KML	TAL CHI
Total/NA	Prep	3050B			363316	12/02/16 09:27	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363546	12/03/16 23:15	PJ1	TAL CHI
Total/NA	Prep	7471B			363371	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 11:54	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: 500-120792-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-120792  
 Chain of Custody Number: ESY6-09  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: 3.9-7.36

Client		Client Project #		Preservative		Parameter						Preservative Key 1. HCL, Cool to 4° 2. HCL, Cool to 4° 3. HCL, Cool to 4° 4. HCL, Cool to 4° 5. HCL, Cool to 4° 6. HCL, Cool to 4° 7. HCL, Cool to 4° 8. HCL, Cool to 4° 9. HCL, Cool to 4° 10. HCL, Cool to 4° 11. HCL, Cool to 4° 12. HCL, Cool to 4° 13. HCL, Cool to 4° 14. HCL, Cool to 4° 500-120792 COC Comments	
Project Name		Lab Project #		# of Containers	Matrix	VOL	SVOL	Totl YMC	Metals	TCUPICAP	TAC WWHI		PH (4.5-11.0)
Project Location/State		Lab PM											
Lab ID	MS/MSD	Sample ID	Date	Time									
1		1314V3-66-B01 (0-7)	11-30-16	0915	2	S	X	X	X	X	X	X	64E26
2		1314V3-66-B01 (0-7)D	11-30-16	0915	2	S	X	X	X	X	X	X	
3		1314V3-66-B02 (0-6)	11-30-16	0930	2	S	X	X	X	X	X	X	
<del>11-30-16</del>													

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>ISB</u>	Date <u>11-30-16</u>	Time <u>1:00</u>	Received By <u>[Signature]</u>	Company <u>TACMI</u>	Date <u>12/01/16</u>	Time <u>0925</u>	Lab Courier
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped
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:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference#: \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-126792

Chain of Custody Number: E84610

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: 39-736

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		Project Location/State		Lab Project #		Lab P#											
774		Rock Island County, IL		50012744		8-Wright											
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix											Comments
			Date	Time													
4		1314V3-67-B04 (0-7)	11-30-16	1425	2 S	Voc	X	X	X	X	X						64E26
5		1314V3-67-B04 (7-13)	11-30-16	1430	2 S	SUUC	X	X	X	X	X						
6		1314V3-67-B05 (0-6)	11-30-16	1450	2 S	Total Lead metal	X	X	X	X	X						
7		1314V3-67-B03 (0-4)	11-30-16	1525	2 S	TCCP/PPUP	X	X	X	X	X						
8		1314V3-67-B02 (0-6)	11-30-16	1540	2 S	TAH metals	X	X	X	X	X						
9		1314V3-67-B01 (0-5)	11-30-16	1600	2 S	pesticides	X	X	X	X	X						
10		1314V3-67-B01 (5-9)	11-30-16	1605	2 S		X	X	X	X	X						
11		1314V3-67-B08 (0-4)	11-30-16	1620	2 S		X	X	X	X	X						
12		1314V3-67-B07 (0-4)	11-30-16	1630	2 S		X	X	X	X	X						
13		1314V3-67-B06 (0-4)	11-30-16	1645	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	11-30-16	1730	<i>[Signature]</i>	TACHF	12/16/16	0925
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier \_\_\_\_\_

Shipped \_\_\_\_\_

Hand Delivered \_\_\_\_\_

Matrix Key

- WW - Wastewater
- 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: 500-120792-1

**Login Number: 120792**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





## Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120792-1

**Login Number: 120792**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-120795-1  
Client Project/Site: IDOT - I-74 - WO 046

For:  
Ecology and Environment, Inc.  
33 West Monroe St.  
Suite 1410  
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout

*Jodie Bracken*

Authorized for release by:  
12/14/2016 4:02:37 PM  
Jodie Bracken, Project Management Assistant II  
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Designee for  
Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto: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: 500-120795-1

**Job ID: 500-120795-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-120795-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 12/1/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-120795-E-1-K MS) and (500-120795-E-1-L MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method(s) 6010B: The laboratory blank for preparation batch 500-363481 and 500-363611 contained Boron above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Lab Sample ID: 500-120795-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0098	J F1 F2	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.028	J F1 F2	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.034	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.021	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.033	J	0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.5		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	80		0.53	0.097	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	21000		11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.5		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	630		26	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.26	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	1500		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.85		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.079	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.46		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.059	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B39 (0-4)**

**Lab Sample ID: 500-120795-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.5		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	82		0.50	0.092	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	1.8	J	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	2300		10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.50	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.8		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Client Sample ID: 1314V3-01-B39 (0-4) (Continued)

## Lab Sample ID: 500-120795-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	14		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.25	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	1800		5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.50	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	25		0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	590		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Sodium	750		50	6.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.41	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.024		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B32 (0-6)

## Lab Sample ID: 500-120795-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.029	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0064	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.055		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.048		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.028	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.031	J	0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.043		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.031	J	0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.016	J	0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.7		0.48	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.48	0.088	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.19	0.042	mg/Kg	1	☼	6010B	Total/NA
Boron	3.5		2.4	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.096	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	90000		96	31	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.6	B	0.48	0.083	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.9		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	9.6	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	36		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000		4.8	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	930		0.48	0.095	mg/Kg	1	☼	6010B	Total/NA
Nickel	18		0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	680		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J	0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		48	6.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.24	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	42		0.96	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.85		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J B	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: 500-120795-1

## Client Sample ID: 1314V3-01-B32 (0-6) (Continued)

## Lab Sample ID: 500-120795-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.60		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.023	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.31		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B33 (0-2.5)

## Lab Sample ID: 500-120795-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.012	J	0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.18		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.042		0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.31		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.23		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.13		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.13		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.18		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.071		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.058		0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.049		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.1		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	3.8		2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.29		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	73000		110	36	mg/Kg	10	☼	6010B	Total/NA
Chromium	11	B	0.57	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.3		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	75		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	18		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	820		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	950		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.079	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.022	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.032		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B29 (0-5)

## Lab Sample ID: 500-120795-5

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Client Sample ID: 1314V3-01-B29 (0-5) (Continued)

## Lab Sample ID: 500-120795-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzof[a]anthracene	0.0053	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.3		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.47	0.087	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA
Boron	2.9		2.4	0.33	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.095	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		95	30	mg/Kg	10	☼	6010B	Total/NA
Chromium	12	B	0.47	0.081	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.6		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	9.5	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	16000		4.7	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.47	0.094	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	740		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		47	6.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.24	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	42		0.95	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.58		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.025	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.017	0.0089	mg/Kg	1	☼	7471B	Total/NA
pH	9.4		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B21 (0-6)

## Lab Sample ID: 500-120795-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.6		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.53	0.098	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	3.9		2.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	67000		110	34	mg/Kg	10	☼	6010B	Total/NA
Chromium	12	B	0.53	0.092	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.8		0.27	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.3	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	850		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	440		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.27	0.078	mg/Kg	1	☼	6010B	Total/NA
Zinc	41		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Client Sample ID: 1314V3-01-B21 (0-6) (Continued)

## Lab Sample ID: 500-120795-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.96		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.055		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.024	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.023	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.72		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.017	0.0088	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B25 (0-8.2)

## Lab Sample ID: 500-120795-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.019	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.019	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.011	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.011	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.013	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0091	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	33000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.9		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	9.6		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	770		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	110		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	37		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.82		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	5.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.032	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.034		0.017	0.0089	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B26 (0-2)

## Lab Sample ID: 500-120795-8

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B26 (0-2) (Continued)**

**Lab Sample ID: 500-120795-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.012	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.016	J	0.036	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.021	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.35		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.080		0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.75		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.61		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.34		0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.37		0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.096	J	0.18	0.066	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.58		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.22		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.39		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.18		0.036	0.0093	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.037		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.15		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		0.45	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	71		0.45	0.082	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.18	0.039	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7		2.2	0.31	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22		0.090	0.026	mg/Kg	1	☼	6010B	Total/NA
Calcium	21000		9.0	2.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	26	B	0.45	0.077	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.45	0.097	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B	9.0	3.5	mg/Kg	1	☼	6010B	Total/NA
Lead	38		0.22	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8900		4.5	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	430		0.45	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	27		0.45	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	940		22	3.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.29	J	0.45	0.22	mg/Kg	1	☼	6010B	Total/NA
Sodium	380		45	5.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.22	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	63		0.90	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	0.69		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.058	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.64		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B24 (0-4.5)**

**Lab Sample ID: 500-120795-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.020	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.041		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.034	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.019	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Client Sample ID: 1314V3-01-B24 (0-4.5) (Continued)

## Lab Sample ID: 500-120795-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.021	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.027	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.011	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.020	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.8		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	66		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.22	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	3.1		2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	20000		11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.55	0.094	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.27	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9400		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	810		27	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	130		55	7.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.27	0.080	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.066	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.82		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.023	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.020	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.016	0.0085	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B23 (0-8)

## Lab Sample ID: 500-120795-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.4		0.52	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	66		0.52	0.096	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.21	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	3.0		2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000		100	34	mg/Kg	10	☼	6010B	Total/NA
Chromium	11	B	0.52	0.090	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.7		0.26	0.059	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	10	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	8.3		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.2	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	240		0.52	0.10	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B23 (0-8) (Continued)**

**Lab Sample ID: 500-120795-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Nickel	13		0.52	0.14	mg/Kg	1		☼	6010B	Total/NA
Potassium	690		26	4.3	mg/Kg	1		☼	6010B	Total/NA
Sodium	210		52	6.9	mg/Kg	1		☼	6010B	Total/NA
Vanadium	15		0.26	0.076	mg/Kg	1		☼	6010B	Total/NA
Zinc	32		1.0	0.33	mg/Kg	1		☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.052	J B	0.50	0.050	mg/L	1			6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1			6010B	TCLP
Mercury	0.012	J	0.019	0.0097	mg/Kg	1		☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1			9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Sample Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120795-1	1314V3-01-B38 (0-4)	Solid	11/30/16 07:55	12/01/16 09:25
500-120795-2	1314V3-01-B39 (0-4)	Solid	11/30/16 08:15	12/01/16 09:25
500-120795-3	1314V3-01-B32 (0-6)	Solid	11/30/16 09:50	12/01/16 09:25
500-120795-4	1314V3-01-B33 (0-2.5)	Solid	11/30/16 10:05	12/01/16 09:25
500-120795-5	1314V3-01-B29 (0-5)	Solid	11/30/16 10:25	12/01/16 09:25
500-120795-6	1314V3-01-B21 (0-6)	Solid	11/30/16 11:05	12/01/16 09:25
500-120795-7	1314V3-01-B25 (0-8.2)	Solid	11/30/16 12:25	12/01/16 09:25
500-120795-8	1314V3-01-B26 (0-2)	Solid	11/30/16 12:50	12/01/16 09:25
500-120795-9	1314V3-01-B24 (0-4.5)	Solid	11/30/16 13:15	12/01/16 09:25
500-120795-10	1314V3-01-B23 (0-8)	Solid	11/30/16 13:35	12/01/16 09:25

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Lab Sample ID: 500-120795-1**

**Date Collected: 11/30/16 07:55**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.2**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/02/16 22:23	1
Dibromofluoromethane	100		75 - 120	12/01/16 16:55	12/02/16 22:23	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/01/16 16:55	12/02/16 22:23	1
Toluene-d8 (Surr)	99		75 - 123	12/01/16 16:55	12/02/16 22:23	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Bis(2-chloroethyl)ether	<0.20	F1	0.20	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
1,3-Dichlorobenzene	<0.20	F1	0.20	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Lab Sample ID: 500-120795-1**

**Date Collected: 11/30/16 07:55**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20	F1 F2	0.20	0.047	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
N-Nitrosodi-n-propylamine	<0.079	F1 F2	0.079	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachloroethane	<0.20	F1 F2	0.20	0.060	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Chloroaniline	<0.79	F1	0.79	0.18	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4,6-Trichlorophenol	<0.39	F1	0.39	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4,5-Trichlorophenol	<0.39	F1	0.39	0.090	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachlorocyclopentadiene	<0.79	F1	0.79	0.23	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Methylnaphthalene	<0.079	F1 F2	0.079	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
3-Nitroaniline	<0.39	F2	0.39	0.12	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
2,4-Dinitrotoluene	<0.20	F1 F2	0.20	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Acenaphthene	<0.039	F1 F2	0.039	0.0071	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Dibenzofuran	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Fluorene	<0.039	F1 F2	0.039	0.0055	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Bromophenyl phenyl ether	<0.20	F1 F2	0.20	0.052	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Hexachlorobenzene	<0.079	F1 F2	0.079	0.0091	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Diethyl phthalate	<0.20	F1 F2	0.20	0.067	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4-Chlorophenyl phenyl ether	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
N-Nitrosodiphenylamine	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
4,6-Dinitro-2-methylphenol	<0.79	F2	0.79	0.32	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Phenanthrene</b>	<b>0.0098</b>	<b>J F1 F2</b>	0.039	0.0055	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Anthracene	<0.039	F1 F2	0.039	0.0066	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Carbazole	<0.20	F2	0.20	0.098	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Di-n-butyl phthalate	<0.20	F2	0.20	0.060	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Fluoranthene</b>	<b>0.028</b>	<b>J F1 F2</b>	0.039	0.0073	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Pyrene</b>	<b>0.034</b>	<b>J</b>	0.039	0.0078	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Benzo[a]anthracene</b>	<b>0.021</b>	<b>J</b>	0.039	0.0053	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Lab Sample ID: 500-120795-1**

**Date Collected: 11/30/16 07:55**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.021</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
3,3'-Dichlorobenzidine	<0.20	F2	0.20	0.055	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Di-n-octyl phthalate	<0.20	F2	0.20	0.064	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Benzo[b]fluoranthene</b>	<b>0.033</b>	<b>J</b>	0.039	0.0085	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Benzo[a]pyrene</b>	<b>0.024</b>	<b>J</b>	0.039	0.0076	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.021</b>	<b>J</b>	0.039	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Benzo[g,h,i]perylene</b>	<b>0.022</b>	<b>J</b>	0.039	0.013	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
3 & 4 Methylphenol	<0.20	F1	0.20	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 20:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	101		40 - 130				12/08/16 07:31	12/09/16 20:28	1
Phenol-d5	90		36 - 123				12/08/16 07:31	12/09/16 20:28	1
Nitrobenzene-d5	79		33 - 124				12/08/16 07:31	12/09/16 20:28	1
2-Fluorobiphenyl	83		42 - 115				12/08/16 07:31	12/09/16 20:28	1
2,4,6-Tribromophenol	64		25 - 130				12/08/16 07:31	12/09/16 20:28	1
Terphenyl-d14	84		25 - 150				12/08/16 07:31	12/09/16 20:28	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Arsenic</b>	<b>4.5</b>		0.53	0.24	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Barium</b>	<b>80</b>		0.53	0.097	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Beryllium</b>	<b>0.44</b>		0.21	0.046	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Boron</b>	<b>2.7</b>		2.6	0.37	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Cadmium</b>	<b>0.17</b>		0.11	0.031	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Calcium</b>	<b>21000</b>		11	3.4	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Chromium</b>	<b>12</b>	<b>B</b>	0.53	0.091	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Cobalt</b>	<b>6.5</b>		0.26	0.060	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Copper</b>	<b>12</b>		0.53	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Iron</b>	<b>12000</b>	<b>B</b>	11	4.1	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Lead</b>	<b>14</b>		0.26	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Magnesium</b>	<b>11000</b>		5.3	2.1	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Manganese</b>	<b>250</b>		0.53	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Nickel</b>	<b>16</b>		0.53	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Potassium</b>	<b>630</b>		26	4.3	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Selenium</b>	<b>0.26</b>	<b>J</b>	0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Sodium</b>	<b>1500</b>		53	7.0	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Vanadium</b>	<b>22</b>		0.26	0.077	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1
<b>Zinc</b>	<b>43</b>		1.1	0.33	mg/Kg	☼	12/05/16 08:55	12/05/16 18:47	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.85</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 18:10	1
<b>Boron</b>	<b>0.079</b>	<b>J B</b>	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:10	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Lab Sample ID: 500-120795-1**

**Date Collected: 11/30/16 07:55**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0025</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
<b>Manganese</b>	<b>0.46</b>		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
<b>Nickel</b>	<b>0.011</b>	<b>J</b>	0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
<b>Selenium</b>	<b>0.021</b>	<b>J</b>	0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:10	1
<b>Zinc</b>	<b>0.059</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:10	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.6</b>		0.025	0.010	mg/L	-	12/06/16 08:03	12/07/16 23:15	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 10:49	12/06/16 17:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:09	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:01	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.027</b>		0.017	0.0091	mg/Kg	☼	12/02/16 14:45	12/05/16 12:38	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.7</b>		0.2	0.2	SU	-		12/02/16 20:06	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B39 (0-4)**

**Lab Sample ID: 500-120795-2**

**Date Collected: 11/30/16 08:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 79.5**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Carbon disulfide	<0.0046		0.0046	0.00097	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/01/16 16:55	12/02/16 22:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/01/16 16:55	12/02/16 22:47	1
Dibromofluoromethane	97		75 - 120	12/01/16 16:55	12/02/16 22:47	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/01/16 16:55	12/02/16 22:47	1
Toluene-d8 (Surr)	100		75 - 123	12/01/16 16:55	12/02/16 22:47	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1

TestAmerica Chicago

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**Lab Sample ID: 500-120795-2**

**Date Collected: 11/30/16 08:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 79.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B39 (0-4)**

**Lab Sample ID: 500-120795-2**

**Date Collected: 11/30/16 08:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 79.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/08/16 07:31	12/09/16 22:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/08/16 07:31	12/09/16 22:25	1
Phenol-d5	80		36 - 123	12/08/16 07:31	12/09/16 22:25	1
Nitrobenzene-d5	68		33 - 124	12/08/16 07:31	12/09/16 22:25	1
2-Fluorobiphenyl	73		42 - 115	12/08/16 07:31	12/09/16 22:25	1
2,4,6-Tribromophenol	67		25 - 130	12/08/16 07:31	12/09/16 22:25	1
Terphenyl-d14	78		25 - 150	12/08/16 07:31	12/09/16 22:25	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Arsenic</b>	<b>5.5</b>		0.50	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Barium</b>	<b>82</b>		0.50	0.092	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Beryllium</b>	<b>0.45</b>		0.20	0.044	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Boron</b>	<b>1.8 J</b>		2.5	0.35	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Cadmium</b>	<b>0.20</b>		0.10	0.029	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Calcium</b>	<b>2300</b>		10	3.2	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Chromium</b>	<b>13 B</b>		0.50	0.087	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Cobalt</b>	<b>9.8</b>		0.25	0.057	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Copper</b>	<b>14</b>		0.50	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Iron</b>	<b>14000 B</b>		10	3.9	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Lead</b>	<b>12</b>		0.25	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Magnesium</b>	<b>1800</b>		5.0	2.0	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Manganese</b>	<b>440</b>		0.50	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Nickel</b>	<b>25</b>		0.50	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Potassium</b>	<b>590</b>		25	4.1	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Selenium	<0.50		0.50	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Sodium</b>	<b>750</b>		50	6.7	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Vanadium</b>	<b>25</b>		0.25	0.074	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1
<b>Zinc</b>	<b>57</b>		1.0	0.32	mg/Kg	☼	12/05/16 08:55	12/05/16 18:51	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.41 J</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 18:15	1
Boron	<0.50		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:15	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B39 (0-4)**

**Lab Sample ID: 500-120795-2**

**Date Collected: 11/30/16 08:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 79.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
<b>Manganese</b>	<b>0.018</b>	<b>J</b>	0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:15	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:15	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 10:49	12/06/16 17:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:12	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:06	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.018	0.0095	mg/Kg	☼	12/02/16 14:45	12/05/16 12:41	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.2</b>		0.2	0.2	SU	-		12/02/16 20:13	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B32 (0-6)**

**Lab Sample ID: 500-120795-3**

**Date Collected: 11/30/16 09:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/01/16 16:55	12/02/16 23:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/01/16 16:55	12/02/16 23:12	1
Dibromofluoromethane	99		75 - 120	12/01/16 16:55	12/02/16 23:12	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/02/16 23:12	1
Toluene-d8 (Surr)	102		75 - 123	12/01/16 16:55	12/02/16 23:12	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	☼	12/08/16 07:31	12/10/16 01:20	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B32 (0-6)**

**Lab Sample ID: 500-120795-3**

**Date Collected: 11/30/16 09:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Phenanthrene</b>	<b>0.029</b>	<b>J</b>	0.036	0.0051	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Anthracene</b>	<b>0.0064</b>	<b>J</b>	0.036	0.0061	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Fluoranthene</b>	<b>0.055</b>		0.036	0.0067	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Pyrene</b>	<b>0.048</b>		0.036	0.0072	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Benzo[a]anthracene</b>	<b>0.028</b>	<b>J</b>	0.036	0.0049	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B32 (0-6)**

**Lab Sample ID: 500-120795-3**

Date Collected: 11/30/16 09:50

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 88.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.031</b>	<b>J</b>	0.036	0.0099	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Benzo[b]fluoranthene</b>	<b>0.043</b>		0.036	0.0078	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Benzo[k]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.036	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Benzo[a]pyrene</b>	<b>0.031</b>	<b>J</b>	0.036	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.016</b>	<b>J</b>	0.036	0.0094	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Benzo[g,h,i]perylene</b>	<b>0.015</b>	<b>J</b>	0.036	0.012	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 01:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	98		40 - 130				12/08/16 07:31	12/10/16 01:20	1
Phenol-d5	91		36 - 123				12/08/16 07:31	12/10/16 01:20	1
Nitrobenzene-d5	79		33 - 124				12/08/16 07:31	12/10/16 01:20	1
2-Fluorobiphenyl	84		42 - 115				12/08/16 07:31	12/10/16 01:20	1
2,4,6-Tribromophenol	72		25 - 130				12/08/16 07:31	12/10/16 01:20	1
Terphenyl-d14	87		25 - 150				12/08/16 07:31	12/10/16 01:20	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.96		0.96	0.20	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Arsenic</b>	<b>3.7</b>		0.48	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Barium</b>	<b>48</b>		0.48	0.088	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Beryllium</b>	<b>0.42</b>		0.19	0.042	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Boron</b>	<b>3.5</b>		2.4	0.34	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Cadmium</b>	<b>0.22</b>		0.096	0.028	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Calcium</b>	<b>90000</b>		96	31	mg/Kg	☼	12/05/16 08:55	12/06/16 13:08	10
<b>Chromium</b>	<b>9.6</b>	<b>B</b>	0.48	0.083	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Cobalt</b>	<b>7.9</b>		0.24	0.054	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Copper</b>	<b>11</b>		0.48	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Iron</b>	<b>11000</b>	<b>B</b>	9.6	3.7	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Lead</b>	<b>36</b>		0.24	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Magnesium</b>	<b>14000</b>		4.8	2.0	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Manganese</b>	<b>930</b>		0.48	0.095	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Nickel</b>	<b>18</b>		0.48	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Potassium</b>	<b>680</b>		24	3.9	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Selenium</b>	<b>0.31</b>	<b>J</b>	0.48	0.24	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
Silver	<0.24		0.24	0.056	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Sodium</b>	<b>180</b>		48	6.4	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
Thallium	<0.48		0.48	0.24	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Vanadium</b>	<b>14</b>		0.24	0.070	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1
<b>Zinc</b>	<b>42</b>		0.96	0.30	mg/Kg	☼	12/05/16 08:55	12/05/16 18:56	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.85</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 18:34	1
<b>Boron</b>	<b>0.098</b>	<b>J B</b>	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:34	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B32 (0-6)**

**Lab Sample ID: 500-120795-3**

**Date Collected: 11/30/16 09:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 18:34	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:34	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:34	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 18:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 18:34	1
<b>Manganese</b>	<b>0.60</b>		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:34	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:34	1
<b>Selenium</b>	<b>0.023 J</b>		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 18:34	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:34	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 10:49	12/05/16 18:34	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.31</b>		0.025	0.010	mg/L		12/06/16 08:03	12/07/16 23:22	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:26	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:07	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.030</b>		0.019	0.0098	mg/Kg	☼	12/02/16 14:45	12/05/16 12:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.2</b>		0.2	0.2	SU			12/02/16 20:20	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B33 (0-2.5)**

**Lab Sample ID: 500-120795-4**

**Date Collected: 11/30/16 10:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.5**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	12/01/16 16:55	12/02/16 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/02/16 23:37	1
Dibromofluoromethane	100		75 - 120	12/01/16 16:55	12/02/16 23:37	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/01/16 16:55	12/02/16 23:37	1
Toluene-d8 (Surr)	98		75 - 123	12/01/16 16:55	12/02/16 23:37	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B33 (0-2.5)**

**Lab Sample ID: 500-120795-4**

**Date Collected: 11/30/16 10:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**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	☼	12/08/16 07:31	12/10/16 01:49	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Acenaphthene</b>	<b>0.012</b>	<b>J</b>	0.038	0.0068	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Fluorene</b>	<b>0.013</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Phenanthrene</b>	<b>0.18</b>		0.038	0.0053	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Anthracene</b>	<b>0.042</b>		0.038	0.0063	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Fluoranthene</b>	<b>0.31</b>		0.038	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Pyrene</b>	<b>0.23</b>		0.038	0.0075	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Benzo[a]anthracene</b>	<b>0.13</b>		0.038	0.0051	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B33 (0-2.5)**

**Lab Sample ID: 500-120795-4**

**Date Collected: 11/30/16 10:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.13</b>		0.038	0.010	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Benzo[b]fluoranthene</b>	<b>0.18</b>		0.038	0.0082	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Benzo[k]fluoranthene</b>	<b>0.071</b>		0.038	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Benzo[a]pyrene</b>	<b>0.13</b>		0.038	0.0073	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.058</b>		0.038	0.0098	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
<b>Benzo[g,h,i]perylene</b>	<b>0.049</b>		0.038	0.012	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/10/16 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		40 - 130	12/08/16 07:31	12/10/16 01:49	1
Phenol-d5	87		36 - 123	12/08/16 07:31	12/10/16 01:49	1
Nitrobenzene-d5	76		33 - 124	12/08/16 07:31	12/10/16 01:49	1
2-Fluorobiphenyl	81		42 - 115	12/08/16 07:31	12/10/16 01:49	1
2,4,6-Tribromophenol	42		25 - 130	12/08/16 07:31	12/10/16 01:49	1
Terphenyl-d14	85		25 - 150	12/08/16 07:31	12/10/16 01:49	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Arsenic</b>	<b>5.1</b>		0.57	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Barium</b>	<b>58</b>		0.57	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Beryllium</b>	<b>0.44</b>		0.23	0.049	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Boron</b>	<b>3.8</b>		2.8	0.40	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Cadmium</b>	<b>0.29</b>		0.11	0.033	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Calcium</b>	<b>73000</b>		110	36	mg/Kg	☼	12/05/16 08:55	12/06/16 13:12	10
<b>Chromium</b>	<b>11 B</b>		0.57	0.097	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Cobalt</b>	<b>7.3</b>		0.28	0.064	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Copper</b>	<b>14</b>		0.57	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Iron</b>	<b>12000 B</b>		11	4.4	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Lead</b>	<b>75</b>		0.28	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Magnesium</b>	<b>11000</b>		5.7	2.3	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Manganese</b>	<b>370</b>		0.57	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Nickel</b>	<b>18</b>		0.57	0.15	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Potassium</b>	<b>820</b>		28	4.6	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Sodium</b>	<b>950</b>		57	7.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Vanadium</b>	<b>17</b>		0.28	0.083	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1
<b>Zinc</b>	<b>58</b>		1.1	0.36	mg/Kg	☼	12/05/16 08:55	12/05/16 19:00	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.70</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 18:39	1
<b>Boron</b>	<b>0.079 J B</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:39	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B33 (0-2.5)**

**Lab Sample ID: 500-120795-4**

**Date Collected: 11/30/16 10:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**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	-	12/05/16 10:49	12/05/16 18:39	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
<b>Manganese</b>	<b>0.031</b>		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 18:39	1
<b>Zinc</b>	<b>0.022</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 18:39	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	-	12/05/16 10:49	12/06/16 17:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:29	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:09	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.032</b>		0.018	0.0093	mg/Kg	☼	12/02/16 14:45	12/05/16 12:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU	-		12/02/16 20:27	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B29 (0-5)**

**Lab Sample ID: 500-120795-5**

**Date Collected: 11/30/16 10:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.0**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Bromodichloromethane	<0.0015		0.0015	0.00032	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00069	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Vinyl acetate	<0.0039		0.0039	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Vinyl chloride	<0.0015		0.0015	0.00069	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 12:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/01/16 16:55	12/03/16 12:30	1
Dibromofluoromethane	99		75 - 120	12/01/16 16:55	12/03/16 12:30	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/03/16 12:30	1
Toluene-d8 (Surr)	99		75 - 123	12/01/16 16:55	12/03/16 12:30	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	☼	12/08/16 07:31	12/09/16 22:54	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B29 (0-5)**

**Lab Sample ID: 500-120795-5**

**Date Collected: 11/30/16 10:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
<b>Benzo[a]anthracene</b>	<b>0.0053</b>	<b>J</b>	0.036	0.0049	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B29 (0-5)**

**Lab Sample ID: 500-120795-5**

**Date Collected: 11/30/16 10:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:31	12/09/16 22:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	103		40 - 130				12/08/16 07:31	12/09/16 22:54	1
Phenol-d5	93		36 - 123				12/08/16 07:31	12/09/16 22:54	1
Nitrobenzene-d5	82		33 - 124				12/08/16 07:31	12/09/16 22:54	1
2-Fluorobiphenyl	86		42 - 115				12/08/16 07:31	12/09/16 22:54	1
2,4,6-Tribromophenol	64		25 - 130				12/08/16 07:31	12/09/16 22:54	1
Terphenyl-d14	86		25 - 150				12/08/16 07:31	12/09/16 22:54	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.95		0.95	0.20	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Arsenic</b>	<b>4.3</b>		0.47	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Barium</b>	<b>42</b>		0.47	0.087	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Beryllium</b>	<b>0.47</b>		0.19	0.041	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Boron</b>	<b>2.9</b>		2.4	0.33	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Cadmium</b>	<b>0.18</b>		0.095	0.027	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Calcium</b>	<b>57000</b>		95	30	mg/Kg	☼	12/05/16 08:55	12/06/16 13:16	10
<b>Chromium</b>	<b>12 B</b>		0.47	0.081	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Cobalt</b>	<b>7.6</b>		0.24	0.054	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Copper</b>	<b>13</b>		0.47	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Iron</b>	<b>13000 B</b>		9.5	3.7	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Lead</b>	<b>14</b>		0.24	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Magnesium</b>	<b>16000</b>		4.7	1.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Manganese</b>	<b>290</b>		0.47	0.094	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Nickel</b>	<b>19</b>		0.47	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Potassium</b>	<b>740</b>		24	3.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
Selenium	<0.47		0.47	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
Silver	<0.24		0.24	0.055	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Sodium</b>	<b>1100</b>		47	6.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
Thallium	<0.47		0.47	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Vanadium</b>	<b>19</b>		0.24	0.069	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1
<b>Zinc</b>	<b>42</b>		0.95	0.30	mg/Kg	☼	12/05/16 08:55	12/05/16 19:05	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.53</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 18:44	1
<b>Boron</b>	<b>0.055 J B</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 18:44	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B29 (0-5)**

**Lab Sample ID: 500-120795-5**

**Date Collected: 11/30/16 10:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.0**

**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		12/05/16 10:49	12/05/16 18:44	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:44	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:44	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 18:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 18:44	1
<b>Manganese</b>	<b>0.58</b>		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:44	1
<b>Nickel</b>	<b>0.016</b>	<b>J</b>	0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:44	1
<b>Selenium</b>	<b>0.025</b>	<b>J</b>	0.050	0.020	mg/L		12/05/16 10:49	12/05/16 18:44	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 18:44	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 10:49	12/05/16 18:44	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.4</b>		0.025	0.010	mg/L		12/06/16 08:03	12/07/16 23:29	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		12/05/16 10:49	12/06/16 17:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:40	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:10	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.020</b>		0.017	0.0089	mg/Kg	☼	12/02/16 14:45	12/05/16 12:48	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.4</b>		0.2	0.2	SU			12/02/16 20:34	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B21 (0-6)**

**Lab Sample ID: 500-120795-6**

**Date Collected: 11/30/16 11:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/01/16 16:55	12/03/16 12:54	1
Dibromofluoromethane	102		75 - 120	12/01/16 16:55	12/03/16 12:54	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/01/16 16:55	12/03/16 12:54	1
Toluene-d8 (Surr)	99		75 - 123	12/01/16 16:55	12/03/16 12:54	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B21 (0-6)**

**Lab Sample ID: 500-120795-6**

**Date Collected: 11/30/16 11:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B21 (0-6)**

**Lab Sample ID: 500-120795-6**

**Date Collected: 11/30/16 11:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	12/08/16 07:31	12/09/16 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/08/16 07:31	12/09/16 23:23	1
Phenol-d5	88		36 - 123	12/08/16 07:31	12/09/16 23:23	1
Nitrobenzene-d5	77		33 - 124	12/08/16 07:31	12/09/16 23:23	1
2-Fluorobiphenyl	81		42 - 115	12/08/16 07:31	12/09/16 23:23	1
2,4,6-Tribromophenol	53		25 - 130	12/08/16 07:31	12/09/16 23:23	1
Terphenyl-d14	84		25 - 150	12/08/16 07:31	12/09/16 23:23	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Arsenic</b>	<b>4.6</b>		0.53	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Barium</b>	<b>45</b>		0.53	0.098	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Beryllium</b>	<b>0.47</b>		0.21	0.046	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Boron</b>	<b>3.9</b>		2.7	0.37	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Cadmium</b>	<b>0.19</b>		0.11	0.031	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Calcium</b>	<b>67000</b>		110	34	mg/Kg	☼	12/05/16 08:55	12/06/16 13:33	10
<b>Chromium</b>	<b>12 B</b>		0.53	0.092	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Cobalt</b>	<b>7.8</b>		0.27	0.060	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Copper</b>	<b>13</b>		0.53	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Iron</b>	<b>13000 B</b>		11	4.1	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Lead</b>	<b>11</b>		0.27	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Magnesium</b>	<b>21000</b>		5.3	2.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Manganese</b>	<b>300</b>		0.53	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Nickel</b>	<b>19</b>		0.53	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Potassium</b>	<b>850</b>		27	4.4	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Selenium</b>	<b>0.41 J</b>		0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Silver	<0.27		0.27	0.062	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Sodium</b>	<b>440</b>		53	7.0	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Vanadium</b>	<b>18</b>		0.27	0.078	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1
<b>Zinc</b>	<b>41</b>		1.1	0.34	mg/Kg	☼	12/05/16 08:55	12/05/16 19:10	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.63</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:00	1
<b>Boron</b>	<b>0.073 J B</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:00	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B21 (0-6)**

**Lab Sample ID: 500-120795-6**

**Date Collected: 11/30/16 11:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 19:00	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 19:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 19:00	1
<b>Manganese</b>	<b>0.96</b>		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
<b>Nickel</b>	<b>0.055</b>		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
<b>Selenium</b>	<b>0.024</b>	<b>J</b>	0.050	0.020	mg/L		12/05/16 10:49	12/05/16 19:00	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:00	1
<b>Zinc</b>	<b>0.023</b>	<b>J B</b>	0.50	0.020	mg/L		12/05/16 10:49	12/05/16 19:00	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.72</b>		0.025	0.010	mg/L		12/06/16 08:03	12/07/16 23:36	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:43	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:15	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.029</b>		0.017	0.0088	mg/Kg	☼	12/02/16 14:45	12/05/16 12:50	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.3</b>		0.2	0.2	SU			12/02/16 20:41	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B25 (0-8.2)**

**Lab Sample ID: 500-120795-7**

**Date Collected: 11/30/16 12:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 84.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/03/16 13:19	1
Dibromofluoromethane	101		75 - 120	12/01/16 16:55	12/03/16 13:19	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/03/16 13:19	1
Toluene-d8 (Surr)	100		75 - 123	12/01/16 16:55	12/03/16 13:19	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B25 (0-8.2)**

**Lab Sample ID: 500-120795-7**

**Date Collected: 11/30/16 12:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 84.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
<b>Phenanthrene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
<b>Fluoranthene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0069	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
<b>Pyrene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
<b>Benzo[a]anthracene</b>	<b>0.011</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B25 (0-8.2)**

**Lab Sample ID: 500-120795-7**

**Date Collected: 11/30/16 12:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 84.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.011</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
<b>Benzo[b]fluoranthene</b>	<b>0.013</b>	<b>J</b>	0.037	0.0080	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
<b>Benzo[a]pyrene</b>	<b>0.0091</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/09/16 23:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	113		40 - 130				12/08/16 07:31	12/09/16 23:52	1
Phenol-d5	104		36 - 123				12/08/16 07:31	12/09/16 23:52	1
Nitrobenzene-d5	86		33 - 124				12/08/16 07:31	12/09/16 23:52	1
2-Fluorobiphenyl	93		42 - 115				12/08/16 07:31	12/09/16 23:52	1
2,4,6-Tribromophenol	61		25 - 130				12/08/16 07:31	12/09/16 23:52	1
Terphenyl-d14	92		25 - 150				12/08/16 07:31	12/09/16 23:52	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Arsenic</b>	<b>5.3</b>		0.55	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Barium</b>	<b>31</b>		0.55	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Beryllium</b>	<b>0.46</b>		0.22	0.048	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Boron</b>	<b>2.7</b>	<b>J</b>	2.8	0.39	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Cadmium</b>	<b>0.14</b>		0.11	0.032	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Calcium</b>	<b>33000</b>		11	3.6	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.55	0.095	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Cobalt</b>	<b>7.9</b>		0.28	0.063	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Copper</b>	<b>12</b>		0.55	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Iron</b>	<b>14000</b>	<b>B</b>	11	4.3	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Lead</b>	<b>9.6</b>		0.28	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Magnesium</b>	<b>17000</b>		5.5	2.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Manganese</b>	<b>370</b>		0.55	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Nickel</b>	<b>17</b>		0.55	0.15	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Potassium</b>	<b>770</b>		28	4.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Sodium</b>	<b>110</b>		55	7.3	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Vanadium</b>	<b>17</b>		0.28	0.081	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1
<b>Zinc</b>	<b>37</b>		1.1	0.35	mg/Kg	☼	12/05/16 08:55	12/05/16 19:14	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.82</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:05	1
<b>Boron</b>	<b>0.059</b>	<b>J B</b>	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:05	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B25 (0-8.2)**

**Lab Sample ID: 500-120795-7**

**Date Collected: 11/30/16 12:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 84.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
<b>Cobalt</b>	<b>0.023</b>	<b>J</b>	0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
<b>Manganese</b>	<b>5.2</b>		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
<b>Nickel</b>	<b>0.034</b>		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:05	1
<b>Zinc</b>	<b>0.032</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:05	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.14</b>		0.025	0.010	mg/L	-	12/06/16 08:03	12/07/16 23:43	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 10:49	12/06/16 17:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:46	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:16	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.034</b>		0.017	0.0089	mg/Kg	☼	12/02/16 14:45	12/05/16 12:57	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>7.8</b>		0.2	0.2	SU	-		12/02/16 20:48	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B26 (0-2)**

**Lab Sample ID: 500-120795-8**

**Date Collected: 11/30/16 12:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 90.3**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0084	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	12/01/16 16:55	12/03/16 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/03/16 13:44	1
Dibromofluoromethane	98		75 - 120	12/01/16 16:55	12/03/16 13:44	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/01/16 16:55	12/03/16 13:44	1
Toluene-d8 (Surr)	99		75 - 123	12/01/16 16:55	12/03/16 13:44	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B26 (0-2)**

**Lab Sample ID: 500-120795-8**

**Date Collected: 11/30/16 12:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 90.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dinitrophenol	<0.73		0.73	0.63	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Acenaphthylene</b>	<b>0.012</b>	<b>J</b>	0.036	0.0048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Acenaphthene</b>	<b>0.016</b>	<b>J</b>	0.036	0.0065	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Fluorene</b>	<b>0.021</b>	<b>J</b>	0.036	0.0051	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Phenanthrene</b>	<b>0.35</b>		0.036	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Anthracene</b>	<b>0.080</b>		0.036	0.0060	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Fluoranthene</b>	<b>0.75</b>		0.036	0.0067	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Pyrene</b>	<b>0.61</b>		0.036	0.0072	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Benzo[a]anthracene</b>	<b>0.34</b>		0.036	0.0048	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B26 (0-2)**

**Lab Sample ID: 500-120795-8**

**Date Collected: 11/30/16 12:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 90.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.37</b>		0.036	0.0098	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.096</b>	<b>J</b>	0.18	0.066	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Benzo[b]fluoranthene</b>	<b>0.58</b>		0.036	0.0078	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Benzo[k]fluoranthene</b>	<b>0.22</b>		0.036	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Benzo[a]pyrene</b>	<b>0.39</b>		0.036	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.18</b>		0.036	0.0093	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Dibenz(a,h)anthracene</b>	<b>0.037</b>		0.036	0.0070	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Benzo[g,h,i]perylene</b>	<b>0.15</b>		0.036	0.012	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 02:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	94		40 - 130				12/08/16 07:31	12/10/16 02:18	1
Phenol-d5	87		36 - 123				12/08/16 07:31	12/10/16 02:18	1
Nitrobenzene-d5	73		33 - 124				12/08/16 07:31	12/10/16 02:18	1
2-Fluorobiphenyl	100		42 - 115				12/08/16 07:31	12/10/16 02:18	1
2,4,6-Tribromophenol	79		25 - 130				12/08/16 07:31	12/10/16 02:18	1
Terphenyl-d14	90		25 - 150				12/08/16 07:31	12/10/16 02:18	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.90		0.90	0.19	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Arsenic</b>	<b>3.6</b>		0.45	0.21	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Barium</b>	<b>71</b>		0.45	0.082	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Beryllium</b>	<b>0.53</b>		0.18	0.039	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Boron</b>	<b>3.7</b>		2.2	0.31	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Cadmium</b>	<b>0.22</b>		0.090	0.026	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Calcium</b>	<b>21000</b>		9.0	2.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Chromium</b>	<b>26</b>	<b>B</b>	0.45	0.077	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Cobalt</b>	<b>10</b>		0.22	0.051	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Copper</b>	<b>20</b>		0.45	0.097	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Iron</b>	<b>15000</b>	<b>B</b>	9.0	3.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Lead</b>	<b>38</b>		0.22	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Magnesium</b>	<b>8900</b>		4.5	1.8	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Manganese</b>	<b>430</b>		0.45	0.089	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Nickel</b>	<b>27</b>		0.45	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Potassium</b>	<b>940</b>		22	3.7	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Selenium</b>	<b>0.29</b>	<b>J</b>	0.45	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Silver	<0.22		0.22	0.053	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Sodium</b>	<b>380</b>		45	5.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
Thallium	<0.45		0.45	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Vanadium</b>	<b>25</b>		0.22	0.066	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1
<b>Zinc</b>	<b>63</b>		0.90	0.28	mg/Kg	☼	12/05/16 08:55	12/05/16 19:19	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.69</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:09	1
<b>Boron</b>	<b>0.058</b>	<b>J B</b>	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:09	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B26 (0-2)**

**Lab Sample ID: 500-120795-8**

**Date Collected: 11/30/16 12:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 90.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 19:09	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 19:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 19:09	1
<b>Manganese</b>	<b>0.24</b>		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 19:09	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:09	1
<b>Zinc</b>	<b>0.023</b>	<b>J B</b>	0.50	0.020	mg/L		12/05/16 10:49	12/05/16 19:09	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.64</b>		0.025	0.010	mg/L		12/06/16 08:03	12/07/16 23:49	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:50	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:18	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.026</b>		0.018	0.0094	mg/Kg	☼	12/02/16 14:45	12/05/16 12:59	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.4</b>		0.2	0.2	SU			12/02/16 20:55	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B24 (0-4.5)**

**Lab Sample ID: 500-120795-9**

**Date Collected: 11/30/16 13:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.5**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/01/16 16:55	12/03/16 14:09	1
Dibromofluoromethane	99		75 - 120	12/01/16 16:55	12/03/16 14:09	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/01/16 16:55	12/03/16 14:09	1
Toluene-d8 (Surr)	100		75 - 123	12/01/16 16:55	12/03/16 14:09	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B24 (0-4.5)**

**Lab Sample ID: 500-120795-9**

**Date Collected: 11/30/16 13:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Phenanthrene</b>	<b>0.020</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Fluoranthene</b>	<b>0.041</b>		0.037	0.0069	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Pyrene</b>	<b>0.034</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Benzo[a]anthracene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B24 (0-4.5)**

**Lab Sample ID: 500-120795-9**

**Date Collected: 11/30/16 13:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.021</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Benzo[b]fluoranthene</b>	<b>0.027</b>	<b>J</b>	0.037	0.0080	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Benzo[k]fluoranthene</b>	<b>0.011</b>	<b>J</b>	0.037	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Benzo[a]pyrene</b>	<b>0.020</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0096	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/08/16 07:31	12/10/16 00:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	98		40 - 130				12/08/16 07:31	12/10/16 00:22	1
Phenol-d5	88		36 - 123				12/08/16 07:31	12/10/16 00:22	1
Nitrobenzene-d5	91		33 - 124				12/08/16 07:31	12/10/16 00:22	1
2-Fluorobiphenyl	92		42 - 115				12/08/16 07:31	12/10/16 00:22	1
2,4,6-Tribromophenol	59		25 - 130				12/08/16 07:31	12/10/16 00:22	1
Terphenyl-d14	78		25 - 150				12/08/16 07:31	12/10/16 00:22	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Arsenic</b>	<b>3.8</b>		0.55	0.25	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Barium</b>	<b>66</b>		0.55	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Beryllium</b>	<b>0.54</b>		0.22	0.047	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Boron</b>	<b>3.1</b>		2.7	0.38	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Cadmium</b>	<b>0.20</b>		0.11	0.032	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Calcium</b>	<b>20000</b>		11	3.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Chromium</b>	<b>15</b>	<b>B</b>	0.55	0.094	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Cobalt</b>	<b>11</b>		0.27	0.062	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Copper</b>	<b>15</b>		0.55	0.12	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Iron</b>	<b>14000</b>	<b>B</b>	11	4.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Lead</b>	<b>21</b>		0.27	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Magnesium</b>	<b>9400</b>		5.5	2.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Manganese</b>	<b>340</b>		0.55	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Nickel</b>	<b>20</b>		0.55	0.15	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Potassium</b>	<b>810</b>		27	4.5	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Sodium</b>	<b>130</b>		55	7.2	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Vanadium</b>	<b>24</b>		0.27	0.080	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1
<b>Zinc</b>	<b>51</b>		1.1	0.35	mg/Kg	☼	12/05/16 08:55	12/05/16 19:23	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.77</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:14	1
<b>Boron</b>	<b>0.066</b>	<b>J B</b>	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:14	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B24 (0-4.5)**

**Lab Sample ID: 500-120795-9**

**Date Collected: 11/30/16 13:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0024</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Iron	<0.40		0.40	0.20	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
<b>Manganese</b>	<b>0.82</b>		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
<b>Nickel</b>	<b>0.010</b>	<b>J</b>	0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
<b>Selenium</b>	<b>0.023</b>	<b>J</b>	0.050	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/16 10:49	12/05/16 19:14	1
<b>Zinc</b>	<b>0.020</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/05/16 10:49	12/05/16 19:14	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.20</b>		0.025	0.010	mg/L	-	12/06/16 08:03	12/07/16 23:56	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/16 10:49	12/06/16 17:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/16 10:49	12/06/16 17:53	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/05/16 17:00	12/06/16 09:19	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.039</b>		0.016	0.0085	mg/Kg	☼	12/02/16 14:45	12/05/16 13:01	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>7.8</b>		0.2	0.2	SU	-		12/02/16 21:03	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B23 (0-8)**

**Lab Sample ID: 500-120795-10**

**Date Collected: 11/30/16 13:35**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 89.1**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	12/01/16 16:55	12/03/16 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/01/16 16:55	12/03/16 14:33	1
Dibromofluoromethane	102		75 - 120	12/01/16 16:55	12/03/16 14:33	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/01/16 16:55	12/03/16 14:33	1
Toluene-d8 (Surr)	98		75 - 123	12/01/16 16:55	12/03/16 14:33	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B23 (0-8)**

**Lab Sample ID: 500-120795-10**

**Date Collected: 11/30/16 13:35**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 89.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.043	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Methylnaphthalene	<0.072		0.072	0.0065	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Hexachlorobenzene	<0.072		0.072	0.0082	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Phenanthrene	<0.035		0.035	0.0050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Fluoranthene	<0.035		0.035	0.0066	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Pyrene	<0.035		0.035	0.0071	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[a]anthracene	<0.035		0.035	0.0048	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B23 (0-8)**

**Lab Sample ID: 500-120795-10**

**Date Collected: 11/30/16 13:35**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 89.1**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.035		0.035	0.0097	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[b]fluoranthene	<0.035		0.035	0.0077	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[a]pyrene	<0.035		0.035	0.0069	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/08/16 07:31	12/10/16 00:51	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	97		40 - 130				12/08/16 07:31	12/10/16 00:51	1
Phenol-d5	88		36 - 123				12/08/16 07:31	12/10/16 00:51	1
Nitrobenzene-d5	75		33 - 124				12/08/16 07:31	12/10/16 00:51	1
2-Fluorobiphenyl	80		42 - 115				12/08/16 07:31	12/10/16 00:51	1
2,4,6-Tribromophenol	66		25 - 130				12/08/16 07:31	12/10/16 00:51	1
Terphenyl-d14	78		25 - 150				12/08/16 07:31	12/10/16 00:51	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.22	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Arsenic</b>	<b>2.4</b>		0.52	0.24	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Barium</b>	<b>66</b>		0.52	0.096	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Beryllium</b>	<b>0.43</b>		0.21	0.045	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Boron</b>	<b>3.0</b>		2.6	0.37	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Cadmium</b>	<b>0.14</b>		0.10	0.030	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Calcium</b>	<b>58000</b>		100	34	mg/Kg	☼	12/05/16 08:55	12/06/16 13:37	10
<b>Chromium</b>	<b>11 B</b>		0.52	0.090	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Cobalt</b>	<b>5.7</b>		0.26	0.059	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Copper</b>	<b>10</b>		0.52	0.11	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Iron</b>	<b>10000 B</b>		10	4.0	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Lead</b>	<b>8.3</b>		0.26	0.13	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Magnesium</b>	<b>18000</b>		5.2	2.1	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Manganese</b>	<b>240</b>		0.52	0.10	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Nickel</b>	<b>13</b>		0.52	0.14	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Potassium</b>	<b>690</b>		26	4.3	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Selenium	<0.52		0.52	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Sodium</b>	<b>210</b>		52	6.9	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Vanadium</b>	<b>15</b>		0.26	0.076	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1
<b>Zinc</b>	<b>32</b>		1.0	0.33	mg/Kg	☼	12/05/16 08:55	12/05/16 19:35	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.43 J</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 19:19	1
<b>Boron</b>	<b>0.052 J B</b>		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 19:19	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B23 (0-8)**

**Lab Sample ID: 500-120795-10**

**Date Collected: 11/30/16 13:35**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 89.1**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 19:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 19:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 19:19	1
Manganese	1.5		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Nickel	0.016	J	0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 19:19	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 19:19	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/16 10:49	12/05/16 19:19	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 08:03	12/08/16 00:03	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 17:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 17:57	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:21	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.019	0.0097	mg/Kg	☼	12/02/16 14:45	12/05/16 13:03	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/16 21:10	1

# Definitions/Glossary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## GC/MS VOA

### Prep Batch: 363272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	5035	
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	5035	
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	5035	
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	5035	
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	5035	
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	5035	
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	5035	
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	5035	
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	5035	
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	5035	

### Analysis Batch: 363336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	8260B	363272
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	8260B	363272
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	8260B	363272
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	8260B	363272
MB 500-363336/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-363336/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363336/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 363464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	8260B	363272
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	8260B	363272
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	8260B	363272
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	8260B	363272
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	8260B	363272
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	8260B	363272
MB 500-363464/29	Method Blank	Total/NA	Solid	8260B	
LCS 500-363464/3	Lab Control Sample	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 364110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	3541	
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	3541	
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	3541	
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	3541	
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	3541	
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	3541	
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	3541	
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	3541	
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	3541	
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	3541	
MB 500-364110/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-364110/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-120795-1 MS	1314V3-01-B38 (0-4)	Total/NA	Solid	3541	
500-120795-1 MSD	1314V3-01-B38 (0-4)	Total/NA	Solid	3541	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 364358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-364110/1-A	Method Blank	Total/NA	Solid	8270D	364110
LCS 500-364110/2-A	Lab Control Sample	Total/NA	Solid	8270D	364110

### Analysis Batch: 364469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	8270D	364110
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	8270D	364110
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	8270D	364110
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	8270D	364110
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	8270D	364110
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	8270D	364110
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	8270D	364110
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	8270D	364110
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	8270D	364110
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	8270D	364110
500-120795-1 MS	1314V3-01-B38 (0-4)	Total/NA	Solid	8270D	364110
500-120795-1 MSD	1314V3-01-B38 (0-4)	Total/NA	Solid	8270D	364110

## Metals

### Prep Batch: 363363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	7471B	
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	7471B	
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	7471B	
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	7471B	
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	7471B	
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	7471B	
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	7471B	
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	7471B	
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	7471B	
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	7471B	
MB 500-363363/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-363363/13-A	Lab Control Sample	Total/NA	Solid	7471B	

### Leach Batch: 363481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	TCLP	Solid	1311	
500-120795-2	1314V3-01-B39 (0-4)	TCLP	Solid	1311	
500-120795-3	1314V3-01-B32 (0-6)	TCLP	Solid	1311	
500-120795-4	1314V3-01-B33 (0-2.5)	TCLP	Solid	1311	
500-120795-5	1314V3-01-B29 (0-5)	TCLP	Solid	1311	
500-120795-6	1314V3-01-B21 (0-6)	TCLP	Solid	1311	
500-120795-7	1314V3-01-B25 (0-8.2)	TCLP	Solid	1311	
500-120795-8	1314V3-01-B26 (0-2)	TCLP	Solid	1311	
500-120795-9	1314V3-01-B24 (0-4.5)	TCLP	Solid	1311	
500-120795-10	1314V3-01-B23 (0-8)	TCLP	Solid	1311	
LB 500-363481/1-B	Method Blank	TCLP	Solid	1311	
LB 500-363481/1-C	Method Blank	TCLP	Solid	1311	
500-120795-1 MS	1314V3-01-B38 (0-4)	TCLP	Solid	1311	

TestAmerica Chicago



# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Metals (Continued)

### Leach Batch: 363481 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-2 MS	1314V3-01-B39 (0-4)	TCLP	Solid	1311	
500-120795-1 DU	1314V3-01-B38 (0-4)	TCLP	Solid	1311	
500-120795-2 DU	1314V3-01-B39 (0-4)	TCLP	Solid	1311	

### Leach Batch: 363483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	SPLP East	Solid	1312	
500-120795-3	1314V3-01-B32 (0-6)	SPLP East	Solid	1312	
500-120795-5	1314V3-01-B29 (0-5)	SPLP East	Solid	1312	
500-120795-6	1314V3-01-B21 (0-6)	SPLP East	Solid	1312	
500-120795-7	1314V3-01-B25 (0-8.2)	SPLP East	Solid	1312	
500-120795-8	1314V3-01-B26 (0-2)	SPLP East	Solid	1312	
500-120795-9	1314V3-01-B24 (0-4.5)	SPLP East	Solid	1312	
500-120795-10	1314V3-01-B23 (0-8)	SPLP East	Solid	1312	
LB 500-363483/1-B	Method Blank	SPLP East	Solid	1312	
500-120795-10 MS	1314V3-01-B23 (0-8)	SPLP East	Solid	1312	
500-120795-10 DU	1314V3-01-B23 (0-8)	SPLP East	Solid	1312	

### Prep Batch: 363571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	3050B	
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	3050B	
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	3050B	
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	3050B	
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	3050B	
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	3050B	
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	3050B	
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	3050B	
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	3050B	
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	3050B	
MB 500-363571/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-363571/2-A	Lab Control Sample	Total/NA	Solid	3050B	

### Prep Batch: 363611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	TCLP	Solid	3010A	363481
500-120795-2	1314V3-01-B39 (0-4)	TCLP	Solid	3010A	363481
500-120795-3	1314V3-01-B32 (0-6)	TCLP	Solid	3010A	363481
500-120795-4	1314V3-01-B33 (0-2.5)	TCLP	Solid	3010A	363481
500-120795-5	1314V3-01-B29 (0-5)	TCLP	Solid	3010A	363481
500-120795-6	1314V3-01-B21 (0-6)	TCLP	Solid	3010A	363481
500-120795-7	1314V3-01-B25 (0-8.2)	TCLP	Solid	3010A	363481
500-120795-8	1314V3-01-B26 (0-2)	TCLP	Solid	3010A	363481
500-120795-9	1314V3-01-B24 (0-4.5)	TCLP	Solid	3010A	363481
500-120795-10	1314V3-01-B23 (0-8)	TCLP	Solid	3010A	363481
LB 500-363481/1-B	Method Blank	TCLP	Solid	3010A	363481
LCS 500-363611/3-A	Lab Control Sample	Total/NA	Solid	3010A	
500-120795-2 MS	1314V3-01-B39 (0-4)	TCLP	Solid	3010A	363481
500-120795-2 DU	1314V3-01-B39 (0-4)	TCLP	Solid	3010A	363481

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Metals (Continued)

### Analysis Batch: 363653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	7471B	363363
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	7471B	363363
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	7471B	363363
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	7471B	363363
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	7471B	363363
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	7471B	363363
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	7471B	363363
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	7471B	363363
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	7471B	363363
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	7471B	363363
MB 500-363363/12-A	Method Blank	Total/NA	Solid	7471B	363363
LCS 500-363363/13-A	Lab Control Sample	Total/NA	Solid	7471B	363363

### Prep Batch: 363704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	TCLP	Solid	7470A	363481
500-120795-2	1314V3-01-B39 (0-4)	TCLP	Solid	7470A	363481
500-120795-3	1314V3-01-B32 (0-6)	TCLP	Solid	7470A	363481
500-120795-4	1314V3-01-B33 (0-2.5)	TCLP	Solid	7470A	363481
500-120795-5	1314V3-01-B29 (0-5)	TCLP	Solid	7470A	363481
500-120795-6	1314V3-01-B21 (0-6)	TCLP	Solid	7470A	363481
500-120795-7	1314V3-01-B25 (0-8.2)	TCLP	Solid	7470A	363481
500-120795-8	1314V3-01-B26 (0-2)	TCLP	Solid	7470A	363481
500-120795-9	1314V3-01-B24 (0-4.5)	TCLP	Solid	7470A	363481
500-120795-10	1314V3-01-B23 (0-8)	TCLP	Solid	7470A	363481
LB 500-363481/1-C	Method Blank	TCLP	Solid	7470A	363481
MB 500-363704/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-363704/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-120795-1 MS	1314V3-01-B38 (0-4)	TCLP	Solid	7470A	363481
500-120795-1 DU	1314V3-01-B38 (0-4)	TCLP	Solid	7470A	363481

### Analysis Batch: 363731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	TCLP	Solid	6010B	363611
500-120795-2	1314V3-01-B39 (0-4)	TCLP	Solid	6010B	363611
500-120795-3	1314V3-01-B32 (0-6)	TCLP	Solid	6010B	363611
500-120795-4	1314V3-01-B33 (0-2.5)	TCLP	Solid	6010B	363611
500-120795-5	1314V3-01-B29 (0-5)	TCLP	Solid	6010B	363611
500-120795-6	1314V3-01-B21 (0-6)	TCLP	Solid	6010B	363611
500-120795-7	1314V3-01-B25 (0-8.2)	TCLP	Solid	6010B	363611
500-120795-8	1314V3-01-B26 (0-2)	TCLP	Solid	6010B	363611
500-120795-9	1314V3-01-B24 (0-4.5)	TCLP	Solid	6010B	363611
500-120795-10	1314V3-01-B23 (0-8)	TCLP	Solid	6010B	363611
LB 500-363481/1-B	Method Blank	TCLP	Solid	6010B	363611
LCS 500-363611/3-A	Lab Control Sample	Total/NA	Solid	6010B	363611
500-120795-2 MS	1314V3-01-B39 (0-4)	TCLP	Solid	6010B	363611
500-120795-2 DU	1314V3-01-B39 (0-4)	TCLP	Solid	6010B	363611

### Analysis Batch: 363733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	6010B	363571

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Metals (Continued)

### Analysis Batch: 363733 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	6010B	363571
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	6010B	363571
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	6010B	363571
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	6010B	363571
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	6010B	363571
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	6010B	363571
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	6010B	363571
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	6010B	363571
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	6010B	363571
MB 500-363571/1-A	Method Blank	Total/NA	Solid	6010B	363571
LCS 500-363571/2-A	Lab Control Sample	Total/NA	Solid	6010B	363571

### Prep Batch: 363751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	SPLP East	Solid	3010A	363483
500-120795-3	1314V3-01-B32 (0-6)	SPLP East	Solid	3010A	363483
500-120795-5	1314V3-01-B29 (0-5)	SPLP East	Solid	3010A	363483
500-120795-6	1314V3-01-B21 (0-6)	SPLP East	Solid	3010A	363483
500-120795-7	1314V3-01-B25 (0-8.2)	SPLP East	Solid	3010A	363483
500-120795-8	1314V3-01-B26 (0-2)	SPLP East	Solid	3010A	363483
500-120795-9	1314V3-01-B24 (0-4.5)	SPLP East	Solid	3010A	363483
500-120795-10	1314V3-01-B23 (0-8)	SPLP East	Solid	3010A	363483
LB 500-363483/1-B	Method Blank	SPLP East	Solid	3010A	363483
LCS 500-363751/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-120795-10 MS	1314V3-01-B23 (0-8)	SPLP East	Solid	3010A	363483
500-120795-10 DU	1314V3-01-B23 (0-8)	SPLP East	Solid	3010A	363483

### Analysis Batch: 363785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	TCLP	Solid	7470A	363704
500-120795-2	1314V3-01-B39 (0-4)	TCLP	Solid	7470A	363704
500-120795-3	1314V3-01-B32 (0-6)	TCLP	Solid	7470A	363704
500-120795-4	1314V3-01-B33 (0-2.5)	TCLP	Solid	7470A	363704
500-120795-5	1314V3-01-B29 (0-5)	TCLP	Solid	7470A	363704
500-120795-6	1314V3-01-B21 (0-6)	TCLP	Solid	7470A	363704
500-120795-7	1314V3-01-B25 (0-8.2)	TCLP	Solid	7470A	363704
500-120795-8	1314V3-01-B26 (0-2)	TCLP	Solid	7470A	363704
500-120795-9	1314V3-01-B24 (0-4.5)	TCLP	Solid	7470A	363704
500-120795-10	1314V3-01-B23 (0-8)	TCLP	Solid	7470A	363704
LB 500-363481/1-C	Method Blank	TCLP	Solid	7470A	363704
MB 500-363704/12-A	Method Blank	Total/NA	Solid	7470A	363704
LCS 500-363704/13-A	Lab Control Sample	Total/NA	Solid	7470A	363704
500-120795-1 MS	1314V3-01-B38 (0-4)	TCLP	Solid	7470A	363704
500-120795-1 DU	1314V3-01-B38 (0-4)	TCLP	Solid	7470A	363704

### Analysis Batch: 363828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	6010B	363571
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	6010B	363571
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	6010B	363571
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	6010B	363571

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Metals (Continued)

### Analysis Batch: 363828 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	6010B	363571

### Analysis Batch: 363952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	TCLP	Solid	6020A	363611
500-120795-2	1314V3-01-B39 (0-4)	TCLP	Solid	6020A	363611
500-120795-3	1314V3-01-B32 (0-6)	TCLP	Solid	6020A	363611
500-120795-4	1314V3-01-B33 (0-2.5)	TCLP	Solid	6020A	363611
500-120795-5	1314V3-01-B29 (0-5)	TCLP	Solid	6020A	363611
500-120795-6	1314V3-01-B21 (0-6)	TCLP	Solid	6020A	363611
500-120795-7	1314V3-01-B25 (0-8.2)	TCLP	Solid	6020A	363611
500-120795-8	1314V3-01-B26 (0-2)	TCLP	Solid	6020A	363611
500-120795-9	1314V3-01-B24 (0-4.5)	TCLP	Solid	6020A	363611
500-120795-10	1314V3-01-B23 (0-8)	TCLP	Solid	6020A	363611
LB 500-363481/1-B	Method Blank	TCLP	Solid	6020A	363611
LCS 500-363611/3-A	Lab Control Sample	Total/NA	Solid	6020A	363611
500-120795-2 MS	1314V3-01-B39 (0-4)	TCLP	Solid	6020A	363611
500-120795-2 DU	1314V3-01-B39 (0-4)	TCLP	Solid	6020A	363611

### Analysis Batch: 364150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	SPLP East	Solid	6010B	363751
500-120795-3	1314V3-01-B32 (0-6)	SPLP East	Solid	6010B	363751
500-120795-5	1314V3-01-B29 (0-5)	SPLP East	Solid	6010B	363751
500-120795-6	1314V3-01-B21 (0-6)	SPLP East	Solid	6010B	363751
500-120795-7	1314V3-01-B25 (0-8.2)	SPLP East	Solid	6010B	363751
500-120795-8	1314V3-01-B26 (0-2)	SPLP East	Solid	6010B	363751
500-120795-9	1314V3-01-B24 (0-4.5)	SPLP East	Solid	6010B	363751
500-120795-10	1314V3-01-B23 (0-8)	SPLP East	Solid	6010B	363751
LB 500-363483/1-B	Method Blank	SPLP East	Solid	6010B	363751
LCS 500-363751/2-A	Lab Control Sample	Total/NA	Solid	6010B	363751
500-120795-10 MS	1314V3-01-B23 (0-8)	SPLP East	Solid	6010B	363751
500-120795-10 DU	1314V3-01-B23 (0-8)	SPLP East	Solid	6010B	363751

## General Chemistry

### Analysis Batch: 363206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	Moisture	
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	Moisture	
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	Moisture	
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	Moisture	
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	Moisture	
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	Moisture	
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	Moisture	
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	Moisture	
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	Moisture	
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	Moisture	
500-120795-1 DU	1314V3-01-B38 (0-4)	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## General Chemistry (Continued)

### Analysis Batch: 363480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120795-1	1314V3-01-B38 (0-4)	Total/NA	Solid	9045D	
500-120795-2	1314V3-01-B39 (0-4)	Total/NA	Solid	9045D	
500-120795-3	1314V3-01-B32 (0-6)	Total/NA	Solid	9045D	
500-120795-4	1314V3-01-B33 (0-2.5)	Total/NA	Solid	9045D	
500-120795-5	1314V3-01-B29 (0-5)	Total/NA	Solid	9045D	
500-120795-6	1314V3-01-B21 (0-6)	Total/NA	Solid	9045D	
500-120795-7	1314V3-01-B25 (0-8.2)	Total/NA	Solid	9045D	
500-120795-8	1314V3-01-B26 (0-2)	Total/NA	Solid	9045D	
500-120795-9	1314V3-01-B24 (0-4.5)	Total/NA	Solid	9045D	
500-120795-10	1314V3-01-B23 (0-8)	Total/NA	Solid	9045D	

# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## 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)
500-120795-1	1314V3-01-B38 (0-4)	105	100	106	99
500-120795-2	1314V3-01-B39 (0-4)	104	97	102	100
500-120795-3	1314V3-01-B32 (0-6)	106	99	103	102
500-120795-4	1314V3-01-B33 (0-2.5)	105	100	108	98
500-120795-5	1314V3-01-B29 (0-5)	107	99	103	99
500-120795-6	1314V3-01-B21 (0-6)	106	102	109	99
500-120795-7	1314V3-01-B25 (0-8.2)	105	101	103	100
500-120795-8	1314V3-01-B26 (0-2)	105	98	103	99
500-120795-9	1314V3-01-B24 (0-4.5)	105	99	105	100
500-120795-10	1314V3-01-B23 (0-8)	106	102	102	98
LCS 500-363336/5	Lab Control Sample	103	93	90	103
LCS 500-363464/3	Lab Control Sample	100	95	93	101
LCSD 500-363336/6	Lab Control Sample Dup	101	97	94	103
MB 500-363336/7	Method Blank	102	92	87	101
MB 500-363464/29	Method Blank	105	100	98	100

#### 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)
500-120795-1	1314V3-01-B38 (0-4)	101	90	79	83	64	84
500-120795-1 MS	1314V3-01-B38 (0-4)	84	79	88	73	65	77
500-120795-1 MSD	1314V3-01-B38 (0-4)	89	83	97	70	52	78
500-120795-2	1314V3-01-B39 (0-4)	88	80	68	73	67	78
500-120795-3	1314V3-01-B32 (0-6)	98	91	79	84	72	87
500-120795-4	1314V3-01-B33 (0-2.5)	96	87	76	81	42	85
500-120795-5	1314V3-01-B29 (0-5)	103	93	82	86	64	86
500-120795-6	1314V3-01-B21 (0-6)	99	88	77	81	53	84
500-120795-7	1314V3-01-B25 (0-8.2)	113	104	86	93	61	92
500-120795-8	1314V3-01-B26 (0-2)	94	87	73	100	79	90
500-120795-9	1314V3-01-B24 (0-4.5)	98	88	91	92	59	78
500-120795-10	1314V3-01-B23 (0-8)	97	88	75	80	66	78
LCS 500-364110/2-A	Lab Control Sample	109	101	100	88	86	92
MB 500-364110/1-A	Method Blank	107	98	101	88	76	94

#### Surrogate Legend

2FP = 2-Fluorophenol

PHL = Phenol-d5

NBZ = Nitrobenzene-d5

FBP = 2-Fluorobiphenyl

TBP = 2,4,6-Tribromophenol

TPH = Terphenyl-d14

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-363336/7**

**Matrix: Solid**

**Analysis Batch: 363336**

**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			12/02/16 14:10	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/02/16 14:10	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/02/16 14:10	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/02/16 14:10	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/02/16 14:10	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/02/16 14:10	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/02/16 14:10	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/02/16 14:10	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/02/16 14:10	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/02/16 14:10	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/02/16 14:10	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/02/16 14:10	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/02/16 14:10	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/02/16 14:10	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/02/16 14:10	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/02/16 14:10	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/02/16 14:10	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/02/16 14:10	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/02/16 14:10	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/02/16 14:10	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/02/16 14:10	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/02/16 14:10	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/02/16 14:10	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/02/16 14:10	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/02/16 14:10	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/02/16 14:10	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/02/16 14:10	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/02/16 14:10	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/02/16 14:10	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/02/16 14:10	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/02/16 14:10	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/02/16 14:10	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/02/16 14:10	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/02/16 14:10	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/02/16 14:10	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/02/16 14:10	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/02/16 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 120		12/02/16 14:10	1
Dibromofluoromethane	92		75 - 120		12/02/16 14:10	1
1,2-Dichloroethane-d4 (Surr)	87		69 - 134		12/02/16 14:10	1
Toluene-d8 (Surr)	101		75 - 123		12/02/16 14:10	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363336/5**

**Matrix: Solid**

**Analysis Batch: 363336**

**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	0.0463		mg/Kg		93	40 - 148
Benzene	0.0500	0.0478		mg/Kg		96	70 - 120
Bromodichloromethane	0.0500	0.0488		mg/Kg		98	67 - 120
Bromoform	0.0500	0.0485		mg/Kg		97	50 - 129
Bromomethane	0.0500	0.0418		mg/Kg		84	50 - 134
2-Butanone (MEK)	0.0500	0.0445		mg/Kg		89	47 - 138
Carbon disulfide	0.0500	0.0503		mg/Kg		101	67 - 133
Carbon tetrachloride	0.0500	0.0487		mg/Kg		97	65 - 123
Chlorobenzene	0.0500	0.0488		mg/Kg		98	70 - 120
Chloroethane	0.0500	0.0622		mg/Kg		124	40 - 150
Chloroform	0.0500	0.0495		mg/Kg		99	70 - 120
Chloromethane	0.0500	0.0463		mg/Kg		93	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0485		mg/Kg		97	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0498		mg/Kg		100	70 - 120
Dibromochloromethane	0.0500	0.0491		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0485		mg/Kg		97	70 - 125
1,2-Dichloroethane	0.0500	0.0475		mg/Kg		95	65 - 126
1,1-Dichloroethene	0.0500	0.0506		mg/Kg		101	70 - 122
1,2-Dichloropropane	0.0500	0.0470		mg/Kg		94	70 - 126
Ethylbenzene	0.0500	0.0499		mg/Kg		100	70 - 120
2-Hexanone	0.0500	0.0431		mg/Kg		86	51 - 139
Methylene Chloride	0.0500	0.0506		mg/Kg		101	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0465		mg/Kg		93	51 - 141
Methyl tert-butyl ether	0.0500	0.0470		mg/Kg		94	70 - 121
Styrene	0.0500	0.0499		mg/Kg		100	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0492		mg/Kg		98	70 - 125
Tetrachloroethene	0.0500	0.0513		mg/Kg		103	70 - 122
Toluene	0.0500	0.0504		mg/Kg		101	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0499		mg/Kg		100	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0486		mg/Kg		97	70 - 121
1,1,1-Trichloroethane	0.0500	0.0492		mg/Kg		98	70 - 120
1,1,2-Trichloroethane	0.0500	0.0478		mg/Kg		96	70 - 120
Trichloroethene	0.0500	0.0493		mg/Kg		99	70 - 124
Vinyl acetate	0.0500	0.0441		mg/Kg		88	40 - 150
Vinyl chloride	0.0500	0.0472		mg/Kg		94	64 - 125
Xylenes, Total	0.100	0.101		mg/Kg		101	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 120
Dibromofluoromethane	93		75 - 120
1,2-Dichloroethane-d4 (Surr)	90		69 - 134
Toluene-d8 (Surr)	103		75 - 123



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-363336/6**

**Matrix: Solid**

**Analysis Batch: 363336**

**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	0.0439		mg/Kg		88	40 - 148	5	30
Benzene	0.0500	0.0522		mg/Kg		104	70 - 120	9	30
Bromodichloromethane	0.0500	0.0531		mg/Kg		106	67 - 120	8	30
Bromoform	0.0500	0.0550		mg/Kg		110	50 - 129	12	30
Bromomethane	0.0500	0.0479		mg/Kg		96	50 - 134	13	30
2-Butanone (MEK)	0.0500	0.0449		mg/Kg		90	47 - 138	1	30
Carbon disulfide	0.0500	0.0542		mg/Kg		108	67 - 133	8	30
Carbon tetrachloride	0.0500	0.0528		mg/Kg		106	65 - 123	8	30
Chlorobenzene	0.0500	0.0530		mg/Kg		106	70 - 120	8	30
Chloroethane	0.0500	0.0553		mg/Kg		111	40 - 150	12	30
Chloroform	0.0500	0.0542		mg/Kg		108	70 - 120	9	30
Chloromethane	0.0500	0.0502		mg/Kg		100	63 - 135	8	30
cis-1,2-Dichloroethene	0.0500	0.0533		mg/Kg		107	70 - 120	9	30
cis-1,3-Dichloropropene	0.0500	0.0542		mg/Kg		108	70 - 120	8	30
Dibromochloromethane	0.0500	0.0550		mg/Kg		110	68 - 120	11	30
1,1-Dichloroethane	0.0500	0.0526		mg/Kg		105	70 - 125	8	30
1,2-Dichloroethane	0.0500	0.0528		mg/Kg		106	65 - 126	11	30
1,1-Dichloroethene	0.0500	0.0546		mg/Kg		109	70 - 122	8	30
1,2-Dichloropropane	0.0500	0.0521		mg/Kg		104	70 - 126	10	30
Ethylbenzene	0.0500	0.0533		mg/Kg		107	70 - 120	6	30
2-Hexanone	0.0500	0.0476		mg/Kg		95	51 - 139	10	30
Methylene Chloride	0.0500	0.0562		mg/Kg		112	70 - 121	10	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0489		mg/Kg		98	51 - 141	5	30
Methyl tert-butyl ether	0.0500	0.0546		mg/Kg		109	70 - 121	15	30
Styrene	0.0500	0.0540		mg/Kg		108	70 - 121	8	30
1,1,1,2-Tetrachloroethane	0.0500	0.0555		mg/Kg		111	70 - 125	12	30
Tetrachloroethene	0.0500	0.0549		mg/Kg		110	70 - 122	7	30
Toluene	0.0500	0.0530		mg/Kg		106	70 - 121	5	30
trans-1,2-Dichloroethene	0.0500	0.0540		mg/Kg		108	70 - 120	8	30
trans-1,3-Dichloropropene	0.0500	0.0523		mg/Kg		105	70 - 121	7	30
1,1,1-Trichloroethane	0.0500	0.0528		mg/Kg		106	70 - 120	7	30
1,1,2-Trichloroethane	0.0500	0.0538		mg/Kg		108	70 - 120	12	30
Trichloroethene	0.0500	0.0525		mg/Kg		105	70 - 124	6	30
Vinyl acetate	0.0500	0.0498		mg/Kg		100	40 - 150	12	30
Vinyl chloride	0.0500	0.0516		mg/Kg		103	64 - 125	9	30
Xylenes, Total	0.100	0.110		mg/Kg		110	70 - 123	9	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane	97		75 - 120
1,2-Dichloroethane-d4 (Surr)	94		69 - 134
Toluene-d8 (Surr)	103		75 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-363464/29**

**Matrix: Solid**

**Analysis Batch: 363464**

**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			12/03/16 11:16	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/03/16 11:16	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/03/16 11:16	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/03/16 11:16	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/03/16 11:16	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/03/16 11:16	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/03/16 11:16	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/03/16 11:16	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/03/16 11:16	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/03/16 11:16	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/03/16 11:16	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/03/16 11:16	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/03/16 11:16	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/03/16 11:16	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/03/16 11:16	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/03/16 11:16	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/03/16 11:16	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/03/16 11:16	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/03/16 11:16	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/03/16 11:16	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/03/16 11:16	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/03/16 11:16	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/03/16 11:16	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/03/16 11:16	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/03/16 11:16	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/03/16 11:16	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/03/16 11:16	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/03/16 11:16	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/03/16 11:16	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/03/16 11:16	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/03/16 11:16	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/03/16 11:16	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/03/16 11:16	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/03/16 11:16	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/03/16 11:16	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/03/16 11:16	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/03/16 11:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120		12/03/16 11:16	1
Dibromofluoromethane	100		75 - 120		12/03/16 11:16	1
1,2-Dichloroethane-d4 (Surr)	98		69 - 134		12/03/16 11:16	1
Toluene-d8 (Surr)	100		75 - 123		12/03/16 11:16	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363464/3**

**Matrix: Solid**

**Analysis Batch: 363464**

**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	0.0494		mg/Kg		99	40 - 148
Benzene	0.0500	0.0477		mg/Kg		95	70 - 120
Bromodichloromethane	0.0500	0.0479		mg/Kg		96	67 - 120
Bromoform	0.0500	0.0491		mg/Kg		98	50 - 129
Bromomethane	0.0500	0.0496		mg/Kg		99	50 - 134
2-Butanone (MEK)	0.0500	0.0484		mg/Kg		97	47 - 138
Carbon disulfide	0.0500	0.0493		mg/Kg		99	67 - 133
Carbon tetrachloride	0.0500	0.0492		mg/Kg		98	65 - 123
Chlorobenzene	0.0500	0.0476		mg/Kg		95	70 - 120
Chloroethane	0.0500	0.0543		mg/Kg		109	40 - 150
Chloroform	0.0500	0.0494		mg/Kg		99	70 - 120
Chloromethane	0.0500	0.0505		mg/Kg		101	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0497		mg/Kg		99	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0484		mg/Kg		97	70 - 120
Dibromochloromethane	0.0500	0.0481		mg/Kg		96	68 - 120
1,1-Dichloroethane	0.0500	0.0488		mg/Kg		98	70 - 125
1,2-Dichloroethane	0.0500	0.0471		mg/Kg		94	65 - 126
1,1-Dichloroethene	0.0500	0.0495		mg/Kg		99	70 - 122
1,2-Dichloropropane	0.0500	0.0470		mg/Kg		94	70 - 126
Ethylbenzene	0.0500	0.0493		mg/Kg		99	70 - 120
2-Hexanone	0.0500	0.0496		mg/Kg		99	51 - 139
Methylene Chloride	0.0500	0.0466		mg/Kg		93	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0521		mg/Kg		104	51 - 141
Methyl tert-butyl ether	0.0500	0.0491		mg/Kg		98	70 - 121
Styrene	0.0500	0.0491		mg/Kg		98	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0500		mg/Kg		100	70 - 125
Tetrachloroethene	0.0500	0.0492		mg/Kg		98	70 - 122
Toluene	0.0500	0.0487		mg/Kg		97	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0500		mg/Kg		100	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0479		mg/Kg		96	70 - 121
1,1,1-Trichloroethane	0.0500	0.0488		mg/Kg		98	70 - 120
1,1,2-Trichloroethane	0.0500	0.0475		mg/Kg		95	70 - 120
Trichloroethene	0.0500	0.0491		mg/Kg		98	70 - 124
Vinyl acetate	0.0500	0.0433		mg/Kg		87	40 - 150
Vinyl chloride	0.0500	0.0525		mg/Kg		105	64 - 125
Xylenes, Total	0.100	0.0995		mg/Kg		100	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 120
Dibromofluoromethane	95		75 - 120
1,2-Dichloroethane-d4 (Surr)	93		69 - 134
Toluene-d8 (Surr)	101		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-364110/1-A**

**Matrix: Solid**

**Analysis Batch: 364358**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 364110**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/08/16 07:31	12/09/16 13:30	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364110/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364358**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364110**

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		12/08/16 07:31	12/09/16 13:30	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/08/16 07:31	12/09/16 13:30	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/08/16 07:31	12/09/16 13:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	107		40 - 130	12/08/16 07:31	12/09/16 13:30	1
Phenol-d5	98		36 - 123	12/08/16 07:31	12/09/16 13:30	1
Nitrobenzene-d5	101		33 - 124	12/08/16 07:31	12/09/16 13:30	1
2-Fluorobiphenyl	88		42 - 115	12/08/16 07:31	12/09/16 13:30	1
2,4,6-Tribromophenol	76		25 - 130	12/08/16 07:31	12/09/16 13:30	1
Terphenyl-d14	94		25 - 150	12/08/16 07:31	12/09/16 13:30	1

**Lab Sample ID: LCS 500-364110/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364358**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364110**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.24		mg/Kg		93	55 - 118
Bis(2-chloroethyl)ether	1.33	1.18		mg/Kg		88	53 - 116
1,3-Dichlorobenzene	1.33	1.16		mg/Kg		87	56 - 110
1,4-Dichlorobenzene	1.33	1.15		mg/Kg		86	57 - 110
1,2-Dichlorobenzene	1.33	1.13		mg/Kg		85	56 - 110
2-Methylphenol	1.33	1.33		mg/Kg		100	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.38		mg/Kg		104	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.48		mg/Kg		111	56 - 119
Hexachloroethane	1.33	1.18		mg/Kg		89	54 - 111
2-Chlorophenol	1.33	1.25		mg/Kg		94	57 - 117
Nitrobenzene	1.33	1.35		mg/Kg		101	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.26		mg/Kg		94	59 - 116
1,2,4-Trichlorobenzene	1.33	1.15		mg/Kg		86	60 - 116
Isophorone	1.33	1.20		mg/Kg		90	54 - 120
2,4-Dimethylphenol	1.33	1.20		mg/Kg		90	50 - 120
Hexachlorobutadiene	1.33	1.11		mg/Kg		83	56 - 120
Naphthalene	1.33	1.19		mg/Kg		90	58 - 116
2,4-Dichlorophenol	1.33	1.19		mg/Kg		89	61 - 116

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364110/2-A**

**Matrix: Solid**

**Analysis Batch: 364358**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 364110**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
4-Chloroaniline	1.33	1.40		mg/Kg		105	10 - 150
2,4,6-Trichlorophenol	1.33	1.15		mg/Kg		86	50 - 120
2,4,5-Trichlorophenol	1.33	1.23		mg/Kg		92	42 - 119
Hexachlorocyclopentadiene	1.33	0.803		mg/Kg		60	10 - 116
2-Methylnaphthalene	1.33	1.16		mg/Kg		87	55 - 120
2-Nitroaniline	1.33	1.37		mg/Kg		103	52 - 121
2-Chloronaphthalene	1.33	1.19		mg/Kg		89	57 - 112
4-Chloro-3-methylphenol	1.33	1.26		mg/Kg		95	59 - 117
2,6-Dinitrotoluene	1.33	1.28		mg/Kg		96	57 - 118
2-Nitrophenol	1.33	1.23		mg/Kg		93	58 - 121
3-Nitroaniline	1.33	1.24		mg/Kg		93	20 - 144
Dimethyl phthalate	1.33	1.23		mg/Kg		92	60 - 112
2,4-Dinitrophenol	2.67	0.873		mg/Kg		33	10 - 110
Acenaphthylene	1.33	1.18		mg/Kg		89	57 - 116
2,4-Dinitrotoluene	1.33	1.29		mg/Kg		96	59 - 119
Acenaphthene	1.33	1.19		mg/Kg		89	52 - 113
Dibenzofuran	1.33	1.19		mg/Kg		89	59 - 110
4-Nitrophenol	2.67	2.20		mg/Kg		82	32 - 123
Fluorene	1.33	1.18		mg/Kg		88	56 - 115
4-Nitroaniline	1.33	1.88		mg/Kg		141	55 - 146
4-Bromophenyl phenyl ether	1.33	1.12		mg/Kg		84	61 - 124
Hexachlorobenzene	1.33	1.09		mg/Kg		82	62 - 126
Diethyl phthalate	1.33	1.27		mg/Kg		95	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.15		mg/Kg		87	61 - 111
Pentachlorophenol	2.67	1.72		mg/Kg		64	12 - 116
N-Nitrosodiphenylamine	1.33	1.27		mg/Kg		95	62 - 117
4,6-Dinitro-2-methylphenol	2.67	1.29		mg/Kg		48	10 - 110
Phenanthrene	1.33	1.20		mg/Kg		90	58 - 125
Anthracene	1.33	1.19		mg/Kg		89	57 - 118
Carbazole	1.33	1.71		mg/Kg		129	65 - 137
Di-n-butyl phthalate	1.33	1.30		mg/Kg		97	61 - 123
Fluoranthene	1.33	1.22		mg/Kg		91	61 - 124
Pyrene	1.33	1.22		mg/Kg		92	60 - 115
Butyl benzyl phthalate	1.33	1.33		mg/Kg		99	61 - 115
Benzo[a]anthracene	1.33	1.25		mg/Kg		93	63 - 115
Chrysene	1.33	1.20		mg/Kg		90	63 - 118
3,3'-Dichlorobenzidine	1.33	1.02		mg/Kg		76	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.32		mg/Kg		99	62 - 117
Di-n-octyl phthalate	1.33	1.36		mg/Kg		102	58 - 129
Benzo[b]fluoranthene	1.33	1.28		mg/Kg		96	61 - 123
Benzo[k]fluoranthene	1.33	1.20		mg/Kg		90	59 - 125
Benzo[a]pyrene	1.33	1.24		mg/Kg		93	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.29		mg/Kg		97	50 - 149
Dibenz(a,h)anthracene	1.33	1.32		mg/Kg		99	61 - 134
Benzo[g,h,i]perylene	1.33	1.29		mg/Kg		97	55 - 134
3 & 4 Methylphenol	1.33	1.32		mg/Kg		99	55 - 124

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364110/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364358**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364110**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	109		40 - 130
Phenol-d5	101		36 - 123
Nitrobenzene-d5	100		33 - 124
2-Fluorobiphenyl	88		42 - 115
2,4,6-Tribromophenol	86		25 - 130
Terphenyl-d14	92		25 - 150

**Lab Sample ID: 500-120795-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 364469**

**Client Sample ID: 1314V3-01-B38 (0-4)**  
**Prep Type: Total/NA**  
**Prep Batch: 364110**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20		1.53	1.29		mg/Kg	☼	84	55 - 118
Bis(2-chloroethyl)ether	<0.20	F1	1.53	2.21	F1	mg/Kg	☼	144	53 - 116
1,3-Dichlorobenzene	<0.20	F1	1.53	0.840	F1	mg/Kg	☼	55	56 - 110
1,4-Dichlorobenzene	<0.20		1.53	1.28		mg/Kg	☼	84	57 - 110
1,2-Dichlorobenzene	<0.20	F1 F2	1.53	1.12		mg/Kg	☼	73	56 - 110
2-Methylphenol	<0.20		1.53	1.20		mg/Kg	☼	78	53 - 123
2,2'-oxybis[1-chloropropane]	<0.20		1.53	1.12		mg/Kg	☼	73	22 - 133
N-Nitrosodi-n-propylamine	<0.079	F1 F2	1.53	0.434	F1	mg/Kg	☼	28	56 - 119
Hexachloroethane	<0.20	F1 F2	1.53	1.79	F1	mg/Kg	☼	117	54 - 111
2-Chlorophenol	<0.20		1.53	1.18		mg/Kg	☼	77	57 - 117
Nitrobenzene	<0.039		1.53	1.25		mg/Kg	☼	82	56 - 121
Bis(2-chloroethoxy)methane	<0.20		1.53	1.13		mg/Kg	☼	74	59 - 116
1,2,4-Trichlorobenzene	<0.20		1.53	1.18		mg/Kg	☼	77	60 - 116
Isophorone	<0.20		1.53	0.987		mg/Kg	☼	64	54 - 120
2,4-Dimethylphenol	<0.39		1.53	1.53		mg/Kg	☼	100	50 - 120
Hexachlorobutadiene	<0.20		1.53	1.17		mg/Kg	☼	76	56 - 120
Naphthalene	<0.039		1.53	1.19		mg/Kg	☼	77	58 - 116
2,4-Dichlorophenol	<0.39		1.53	1.71		mg/Kg	☼	111	61 - 116
4-Chloroaniline	<0.79	F1	1.53	2.23		mg/Kg	☼	146	10 - 150
2,4,6-Trichlorophenol	<0.39	F1	1.53	0.366	J F1	mg/Kg	☼	24	50 - 120
2,4,5-Trichlorophenol	<0.39	F1	1.53	0.503	F1	mg/Kg	☼	33	42 - 119
Hexachlorocyclopentadiene	<0.79	F1	1.53	<0.77	F1	mg/Kg	☼	0	10 - 116
2-Methylnaphthalene	<0.079	F1 F2	1.53	1.35		mg/Kg	☼	88	55 - 120
2-Nitroaniline	<0.20		1.53	1.69		mg/Kg	☼	110	52 - 121
2-Chloronaphthalene	<0.20		1.53	1.25		mg/Kg	☼	81	57 - 112
4-Chloro-3-methylphenol	<0.39		1.53	1.21		mg/Kg	☼	79	59 - 117
2,6-Dinitrotoluene	<0.20		1.53	1.12		mg/Kg	☼	73	57 - 118
2-Nitrophenol	<0.39		1.53	1.30		mg/Kg	☼	85	58 - 121
3-Nitroaniline	<0.39	F2	1.53	1.11		mg/Kg	☼	72	20 - 144
Dimethyl phthalate	<0.20		1.53	1.20		mg/Kg	☼	78	60 - 112
2,4-Dinitrophenol	<0.79		3.07	0.847		mg/Kg	☼	28	10 - 110
Acenaphthylene	<0.039		1.53	1.09		mg/Kg	☼	71	57 - 116
2,4-Dinitrotoluene	<0.20	F1 F2	1.53	0.674	F1	mg/Kg	☼	44	59 - 119
Acenaphthene	<0.039	F1 F2	1.53	1.06		mg/Kg	☼	69	52 - 113
Dibenzofuran	<0.20	F1 F2	1.53	1.17		mg/Kg	☼	76	59 - 110
4-Nitrophenol	<0.79		3.07	1.12		mg/Kg	☼	37	32 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120795-1 MS**

**Matrix: Solid**

**Analysis Batch: 364469**

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Prep Type: Total/NA**

**Prep Batch: 364110**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Fluorene	<0.039	F1 F2	1.53	1.27		mg/Kg	☼	83		56 - 115
4-Nitroaniline	<0.39		1.53	1.09		mg/Kg	☼	71		55 - 146
4-Bromophenyl phenyl ether	<0.20	F1 F2	1.53	0.663	F1	mg/Kg	☼	43		61 - 124
Hexachlorobenzene	<0.079	F1 F2	1.53	0.741	F1	mg/Kg	☼	48		62 - 126
Diethyl phthalate	<0.20	F1 F2	1.53	1.30		mg/Kg	☼	85		58 - 117
4-Chlorophenyl phenyl ether	<0.20	F1 F2	1.53	1.25		mg/Kg	☼	81		61 - 111
Pentachlorophenol	<0.79		3.07	0.783		mg/Kg	☼	26		12 - 116
N-Nitrosodiphenylamine	<0.20	F1 F2	1.53	0.720	F1	mg/Kg	☼	47		62 - 117
4,6-Dinitro-2-methylphenol	<0.79	F2	3.07	1.33		mg/Kg	☼	43		10 - 110
Phenanthrene	0.0098	J F1 F2	1.53	0.849	F1	mg/Kg	☼	55		58 - 125
Anthracene	<0.039	F1 F2	1.53	0.833	F1	mg/Kg	☼	54		57 - 118
Carbazole	<0.20	F2	1.53	1.15		mg/Kg	☼	75		65 - 137
Di-n-butyl phthalate	<0.20	F2	1.53	0.996		mg/Kg	☼	65		61 - 123
Fluoranthene	0.028	J F1 F2	1.53	1.11		mg/Kg	☼	71		61 - 124
Pyrene	0.034	J	1.53	1.24		mg/Kg	☼	78		60 - 115
Butyl benzyl phthalate	<0.20		1.53	1.26		mg/Kg	☼	82		61 - 115
Benzo[a]anthracene	0.021	J	1.53	1.33		mg/Kg	☼	85		63 - 115
Chrysene	0.021	J	1.53	1.34		mg/Kg	☼	86		63 - 118
3,3'-Dichlorobenzidine	<0.20	F2	1.53	1.04		mg/Kg	☼	68		40 - 110
Bis(2-ethylhexyl) phthalate	<0.20		1.53	1.38		mg/Kg	☼	90		62 - 117
Di-n-octyl phthalate	<0.20	F2	1.53	1.30		mg/Kg	☼	85		58 - 129
Benzo[b]fluoranthene	0.033	J	1.53	1.36		mg/Kg	☼	87		61 - 123
Benzo[k]fluoranthene	<0.039		1.53	1.45		mg/Kg	☼	94		59 - 125
Benzo[a]pyrene	0.024	J	1.53	1.46		mg/Kg	☼	94		64 - 122
Indeno[1,2,3-cd]pyrene	0.021	J	1.53	1.73		mg/Kg	☼	112		50 - 149
Dibenz(a,h)anthracene	<0.039		1.53	1.52		mg/Kg	☼	99		61 - 134
Benzo[g,h,i]perylene	0.022	J	1.53	1.47		mg/Kg	☼	95		55 - 134
3 & 4 Methylphenol	<0.20	F1	1.53	0.419	F1	mg/Kg	☼	27		55 - 124

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	84		40 - 130
Phenol-d5	79		36 - 123
Nitrobenzene-d5	88		33 - 124
2-Fluorobiphenyl	73		42 - 115
2,4,6-Tribromophenol	65		25 - 130
Terphenyl-d14	77		25 - 150

**Lab Sample ID: 500-120795-1 MSD**

**Matrix: Solid**

**Analysis Batch: 364469**

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Prep Type: Total/NA**

**Prep Batch: 364110**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Phenol	<0.20		1.55	1.39		mg/Kg	☼	89		55 - 118	7	30
Bis(2-chloroethyl)ether	<0.20	F1	1.55	2.28	F1	mg/Kg	☼	147		53 - 116	3	30
1,3-Dichlorobenzene	<0.20	F1	1.55	0.937		mg/Kg	☼	60		56 - 110	11	30
1,4-Dichlorobenzene	<0.20		1.55	1.34		mg/Kg	☼	86		57 - 110	4	30
1,2-Dichlorobenzene	<0.20	F1 F2	1.55	0.654	F1 F2	mg/Kg	☼	42		56 - 110	52	30
2-Methylphenol	<0.20		1.55	1.37		mg/Kg	☼	88		53 - 123	14	30

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120795-1 MSD**

**Matrix: Solid**

**Analysis Batch: 364469**

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Prep Type: Total/NA**

**Prep Batch: 364110**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.20		1.55	1.19		mg/Kg	☼	76	22 - 133	6	30
N-Nitrosodi-n-propylamine	<0.079	F1 F2	1.55	1.21	F2	mg/Kg	☼	78	56 - 119	94	30
Hexachloroethane	<0.20	F1 F2	1.55	1.11	F2	mg/Kg	☼	71	54 - 111	47	30
2-Chlorophenol	<0.20		1.55	1.24		mg/Kg	☼	80	57 - 117	5	30
Nitrobenzene	<0.039		1.55	1.26		mg/Kg	☼	81	56 - 121	1	30
Bis(2-chloroethoxy)methane	<0.20		1.55	1.16		mg/Kg	☼	75	59 - 116	3	30
1,2,4-Trichlorobenzene	<0.20		1.55	1.21		mg/Kg	☼	78	60 - 116	2	30
Isophorone	<0.20		1.55	1.02		mg/Kg	☼	65	54 - 120	3	30
2,4-Dimethylphenol	<0.39		1.55	1.56		mg/Kg	☼	101	50 - 120	2	30
Hexachlorobutadiene	<0.20		1.55	1.19		mg/Kg	☼	76	56 - 120	1	30
Naphthalene	<0.039		1.55	1.22		mg/Kg	☼	78	58 - 116	2	30
2,4-Dichlorophenol	<0.39		1.55	1.77		mg/Kg	☼	114	61 - 116	4	30
4-Chloroaniline	<0.79	F1	1.55	2.34	F1	mg/Kg	☼	151	10 - 150	5	30
2,4,6-Trichlorophenol	<0.39	F1	1.55	0.367	J F1	mg/Kg	☼	24	50 - 120	0	30
2,4,5-Trichlorophenol	<0.39	F1	1.55	0.507	F1	mg/Kg	☼	33	42 - 119	1	30
Hexachlorocyclopentadiene	<0.79	F1	1.55	<0.78	F1	mg/Kg	☼	0	10 - 116	NC	30
2-Methylnaphthalene	<0.079	F1 F2	1.55	2.45	F1 F2	mg/Kg	☼	158	55 - 120	58	30
2-Nitroaniline	<0.20		1.55	1.47		mg/Kg	☼	94	52 - 121	14	30
2-Chloronaphthalene	<0.20		1.55	1.21		mg/Kg	☼	78	57 - 112	3	30
4-Chloro-3-methylphenol	<0.39		1.55	1.05		mg/Kg	☼	68	59 - 117	14	30
2,6-Dinitrotoluene	<0.20		1.55	1.34		mg/Kg	☼	86	57 - 118	17	30
2-Nitrophenol	<0.39		1.55	1.32		mg/Kg	☼	85	58 - 121	1	30
3-Nitroaniline	<0.39	F2	1.55	1.57	F2	mg/Kg	☼	101	20 - 144	34	30
Dimethyl phthalate	<0.20		1.55	1.14		mg/Kg	☼	73	60 - 112	5	30
2,4-Dinitrophenol	<0.79		3.11	1.00		mg/Kg	☼	32	10 - 110	17	30
Acenaphthylene	<0.039		1.55	1.05		mg/Kg	☼	67	57 - 116	4	30
2,4-Dinitrotoluene	<0.20	F1 F2	1.55	1.05	F2	mg/Kg	☼	68	59 - 119	44	30
Acenaphthene	<0.039	F1 F2	1.55	0.386	F1 F2	mg/Kg	☼	25	52 - 113	94	30
Dibenzofuran	<0.20	F1 F2	1.55	0.468	F1 F2	mg/Kg	☼	30	59 - 110	86	30
4-Nitrophenol	<0.79		3.11	1.20		mg/Kg	☼	39	32 - 123	7	30
Fluorene	<0.039	F1 F2	1.55	0.569	F1 F2	mg/Kg	☼	37	56 - 115	76	30
4-Nitroaniline	<0.39		1.55	1.08		mg/Kg	☼	70	55 - 146	1	30
4-Bromophenyl phenyl ether	<0.20	F1 F2	1.55	1.06	F2	mg/Kg	☼	68	61 - 124	46	30
Hexachlorobenzene	<0.079	F1 F2	1.55	1.40	F2	mg/Kg	☼	90	62 - 126	62	30
Diethyl phthalate	<0.20	F1 F2	1.55	0.617	F1 F2	mg/Kg	☼	40	58 - 117	71	30
4-Chlorophenyl phenyl ether	<0.20	F1 F2	1.55	0.556	F1 F2	mg/Kg	☼	36	61 - 111	77	30
Pentachlorophenol	<0.79		3.11	0.824		mg/Kg	☼	27	12 - 116	5	30
N-Nitrosodiphenylamine	<0.20	F1 F2	1.55	0.991	F2	mg/Kg	☼	64	62 - 117	32	30
4,6-Dinitro-2-methylphenol	<0.79	F2	3.11	2.23	F2	mg/Kg	☼	72	10 - 110	51	30
Phenanthrene	0.0098	J F1 F2	1.55	1.50	F2	mg/Kg	☼	96	58 - 125	56	30
Anthracene	<0.039	F1 F2	1.55	1.37	F2	mg/Kg	☼	88	57 - 118	49	30
Carbazole	<0.20	F2	1.55	1.79	F2	mg/Kg	☼	115	65 - 137	43	30
Di-n-butyl phthalate	<0.20	F2	1.55	1.51	F2	mg/Kg	☼	97	61 - 123	41	30
Fluoranthene	0.028	J F1 F2	1.55	2.05	F1 F2	mg/Kg	☼	130	61 - 124	59	30
Pyrene	0.034	J	1.55	1.49		mg/Kg	☼	94	60 - 115	19	30
Butyl benzyl phthalate	<0.20		1.55	1.25		mg/Kg	☼	80	61 - 115	1	30
Benzo[a]anthracene	0.021	J	1.55	1.43		mg/Kg	☼	91	63 - 115	8	30
Chrysene	0.021	J	1.55	1.46		mg/Kg	☼	92	63 - 118	9	30

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120795-1 MSD**

**Matrix: Solid**

**Analysis Batch: 364469**

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Prep Type: Total/NA**

**Prep Batch: 364110**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
3,3'-Dichlorobenzidine	<0.20	F2	1.55	0.735	F2	mg/Kg	☼	47	40 - 110	34	30	
Bis(2-ethylhexyl) phthalate	<0.20		1.55	1.38		mg/Kg	☼	89	62 - 117	0	30	
Di-n-octyl phthalate	<0.20	F2	1.55	1.98	F2	mg/Kg	☼	127	58 - 129	41	30	
Benzo[b]fluoranthene	0.033	J	1.55	1.68		mg/Kg	☼	106	61 - 123	21	30	
Benzo[k]fluoranthene	<0.039		1.55	1.51		mg/Kg	☼	97	59 - 125	4	30	
Benzo[a]pyrene	0.024	J	1.55	1.59		mg/Kg	☼	101	64 - 122	9	30	
Indeno[1,2,3-cd]pyrene	0.021	J	1.55	1.40		mg/Kg	☼	89	50 - 149	22	30	
Dibenz(a,h)anthracene	<0.039		1.55	1.21		mg/Kg	☼	78	61 - 134	23	30	
Benzo[g,h,i]perylene	0.022	J	1.55	1.09		mg/Kg	☼	69	55 - 134	30	30	
3 & 4 Methylphenol	<0.20	F1	1.55	0.337	F1	mg/Kg	☼	22	55 - 124	22	30	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	89		40 - 130
Phenol-d5	83		36 - 123
Nitrobenzene-d5	97		33 - 124
2-Fluorobiphenyl	70		42 - 115
2,4,6-Tribromophenol	52		25 - 130
Terphenyl-d14	78		25 - 150

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-363571/1-A**

**Matrix: Solid**

**Analysis Batch: 363733**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 363571**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.42	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Barium	<1.0		1.0	0.18	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Boron	<5.0		5.0	0.70	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Calcium	<20		20	6.4	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Chromium	0.380	J	1.0	0.17	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Copper	<1.0		1.0	0.22	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Iron	8.44	J	20	7.7	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Lead	<0.50		0.50	0.25	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Magnesium	<10		10	4.1	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Nickel	<1.0		1.0	0.27	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Potassium	<50		50	8.2	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Silver	<0.50		0.50	0.12	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Sodium	<100		100	13	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/05/16 08:55	12/05/16 17:34	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/05/16 08:55	12/05/16 17:34	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Lab Sample ID: LCS 500-363571/2-A**  
**Matrix: Solid**  
**Analysis Batch: 363733**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363571**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	48.1		mg/Kg		96	80 - 120
Arsenic	10.0	9.90		mg/Kg		99	80 - 120
Barium	200	197		mg/Kg		98	80 - 120
Beryllium	5.00	4.85		mg/Kg		97	80 - 120
Boron	100	89.6		mg/Kg		90	80 - 120
Cadmium	5.00	4.83		mg/Kg		97	80 - 120
Calcium	1000	982		mg/Kg		98	80 - 120
Chromium	20.0	19.7		mg/Kg		99	80 - 120
Cobalt	50.0	48.2		mg/Kg		96	80 - 120
Copper	25.0	24.1		mg/Kg		96	80 - 120
Iron	100	105		mg/Kg		105	80 - 120
Lead	10.0	9.51		mg/Kg		95	80 - 120
Magnesium	1000	937		mg/Kg		94	80 - 120
Manganese	50.0	48.5		mg/Kg		97	80 - 120
Nickel	50.0	48.2		mg/Kg		96	80 - 120
Potassium	1000	960		mg/Kg		96	80 - 120
Selenium	10.0	8.96		mg/Kg		90	80 - 120
Silver	5.00	4.56		mg/Kg		91	80 - 120
Sodium	1000	983		mg/Kg		98	80 - 120
Thallium	10.0	8.97		mg/Kg		90	80 - 120
Vanadium	50.0	49.1		mg/Kg		98	80 - 120
Zinc	50.0	46.9		mg/Kg		94	80 - 120

**Lab Sample ID: LCS 500-363611/3-A**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363611**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.533		mg/L		107	80 - 120
Beryllium	0.0500	0.0525		mg/L		105	80 - 120
Boron	1.00	0.971		mg/L		97	80 - 120
Cadmium	0.0500	0.0516		mg/L		103	80 - 120
Chromium	0.200	0.206		mg/L		103	80 - 120
Cobalt	0.500	0.523		mg/L		105	80 - 120
Iron	1.00	0.966		mg/L		97	80 - 120
Lead	0.100	0.0997		mg/L		100	80 - 120
Manganese	0.500	0.521		mg/L		104	80 - 120
Nickel	0.500	0.521		mg/L		104	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120
Silver	0.0500	0.0505		mg/L		101	80 - 120
Zinc	0.500	0.514		mg/L		103	80 - 120

**Lab Sample ID: LCS 500-363751/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363751**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.504		mg/L		101	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-363481/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363611**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/05/16 10:49	12/05/16 17:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/16 10:49	12/05/16 17:38	1
Boron	0.0521	J	0.50	0.050	mg/L		12/05/16 10:49	12/05/16 17:38	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/16 10:49	12/05/16 17:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 17:38	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 17:38	1
Iron	<0.40		0.40	0.20	mg/L		12/05/16 10:49	12/05/16 17:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/16 10:49	12/05/16 17:38	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 17:38	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 17:38	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/16 10:49	12/05/16 17:38	1
Silver	<0.025		0.025	0.010	mg/L		12/05/16 10:49	12/05/16 17:38	1
Zinc	0.0231	J	0.50	0.020	mg/L		12/05/16 10:49	12/05/16 17:38	1

**Lab Sample ID: 500-120795-2 MS**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: 1314V3-01-B39 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363611**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	0.41	J	0.500	0.975		mg/L		112	50 - 150
Beryllium	<0.0040		0.0500	0.0544		mg/L		109	50 - 150
Boron	<0.50		1.00	1.02		mg/L		102	50 - 150
Cadmium	<0.0050		0.0500	0.0602		mg/L		120	50 - 150
Chromium	<0.025		0.200	0.211		mg/L		105	50 - 150
Cobalt	<0.025		0.500	0.562		mg/L		112	50 - 150
Iron	<0.40		1.00	1.00		mg/L		100	50 - 150
Lead	<0.0075		0.100	0.106		mg/L		106	50 - 150
Manganese	0.018	J	0.500	0.548		mg/L		106	50 - 150
Nickel	<0.025		0.500	0.561		mg/L		112	50 - 150
Selenium	<0.050		0.100	0.142		mg/L		142	50 - 150
Silver	<0.025		0.0500	0.0605		mg/L		121	50 - 150
Zinc	<0.50		0.500	0.624		mg/L		125	50 - 150

**Lab Sample ID: 500-120795-2 DU**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: 1314V3-01-B39 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363611**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Barium	0.41	J	0.427	J	mg/L		3	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	<0.50		<0.50		mg/L		NC	20
Cadmium	<0.0050		<0.0050		mg/L		NC	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	0.018	J	0.0182	J	mg/L		2	20
Nickel	<0.025		<0.025		mg/L		NC	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-120795-2 DU**  
**Matrix: Solid**  
**Analysis Batch: 363731**

**Client Sample ID: 1314V3-01-B39 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363611**

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Selenium	<0.050		0.0216	J	mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	<0.50		<0.50		mg/L		NC	20

**Lab Sample ID: LB 500-363483/1-B**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 363751**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 08:03	12/07/16 22:46	1

**Lab Sample ID: 500-120795-10 MS**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-01-B23 (0-8)**  
**Prep Type: SPLP East**  
**Prep Batch: 363751**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Manganese	<0.025		0.500	0.526		mg/L		105	50 - 150

**Lab Sample ID: 500-120795-10 DU**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-01-B23 (0-8)**  
**Prep Type: SPLP East**  
**Prep Batch: 363751**

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Manganese	<0.025		<0.025		mg/L		NC	20

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: LCS 500-363611/3-A**  
**Matrix: Solid**  
**Analysis Batch: 363952**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363611**

Analyte	Spike	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.500		mg/L		100	80 - 120
Thallium	0.100	0.107		mg/L		107	80 - 120

**Lab Sample ID: LB 500-363481/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363952**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363611**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/16 10:49	12/06/16 16:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/16 10:49	12/06/16 16:59	1

**Lab Sample ID: 500-120795-2 MS**  
**Matrix: Solid**  
**Analysis Batch: 363952**

**Client Sample ID: 1314V3-01-B39 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363611**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Antimony	<0.0060		0.500	0.514		mg/L		103	50 - 150

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: 500-120795-2 MS**  
**Matrix: Solid**  
**Analysis Batch: 363952**

**Client Sample ID: 1314V3-01-B39 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363611**  
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Thallium	<0.0020		0.100	0.115		mg/L		115	50 - 150

**Lab Sample ID: 500-120795-2 DU**  
**Matrix: Solid**  
**Analysis Batch: 363952**

**Client Sample ID: 1314V3-01-B39 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363611**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
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 500-363704/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363704**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 08:37	1

**Lab Sample ID: LCS 500-363704/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363704**  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00193		mg/L		97	80 - 120

**Lab Sample ID: LB 500-363481/1-C**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363704**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/16 17:00	12/06/16 09:00	1

**Lab Sample ID: 500-120795-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: 1314V3-01-B38 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363704**  
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000962		mg/L		96	50 - 150

**Lab Sample ID: 500-120795-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 363785**

**Client Sample ID: 1314V3-01-B38 (0-4)**  
**Prep Type: TCLP**  
**Prep Batch: 363704**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-363363/12-A  
 Matrix: Solid  
 Analysis Batch: 363653

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 363363

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg		12/02/16 14:45	12/05/16 12:01	1

Lab Sample ID: LCS 500-363363/13-A  
 Matrix: Solid  
 Analysis Batch: 363653

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 363363

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.165		mg/Kg		99	80 - 120

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Lab Sample ID: 500-120795-1**

**Date Collected: 11/30/16 07:55**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 23:15	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 18:10	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:09	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:01	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 20:06		
					(End)	12/02/16 20:13		
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B38 (0-4)**

**Lab Sample ID: 500-120795-1**

**Date Collected: 11/30/16 07:55**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 83.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 22:23	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/09/16 20:28	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 18:47	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 12:38	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B39 (0-4)**

**Lab Sample ID: 500-120795-2**

**Date Collected: 11/30/16 08:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 18:15	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:12	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B39 (0-4)**

**Lab Sample ID: 500-120795-2**

Date Collected: 11/30/16 08:15

Matrix: Solid

Date Received: 12/01/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	7470A		1	363785	12/06/16 09:06	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 20:13 (End) 12/02/16 20:20	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B39 (0-4)**

**Lab Sample ID: 500-120795-2**

Date Collected: 11/30/16 08:15

Matrix: Solid

Date Received: 12/01/16 09:25

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 22:47	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/09/16 22:25	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 18:51	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 12:41	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B32 (0-6)**

**Lab Sample ID: 500-120795-3**

Date Collected: 11/30/16 09:50

Matrix: Solid

Date Received: 12/01/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 23:22	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 18:34	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:26	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:07	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 20:20 (End) 12/02/16 20:27	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B32 (0-6)**

**Lab Sample ID: 500-120795-3**

**Date Collected: 11/30/16 09:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 23:12	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/10/16 01:20	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 18:56	PJ1	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		10	363828	12/06/16 13:08	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 12:43	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B33 (0-2.5)**

**Lab Sample ID: 500-120795-4**

**Date Collected: 11/30/16 10:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 18:39	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:29	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:09	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JB	TAL CHI
					(Start)	12/02/16 20:27		
					(End)	12/02/16 20:34		
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B33 (0-2.5)**

**Lab Sample ID: 500-120795-4**

**Date Collected: 11/30/16 10:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363336	12/02/16 23:37	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/10/16 01:49	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 19:00	PJ1	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		10	363828	12/06/16 13:12	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B33 (0-2.5)**

**Lab Sample ID: 500-120795-4**

**Date Collected: 11/30/16 10:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 86.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	363653	12/05/16 12:45	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B29 (0-5)**

**Lab Sample ID: 500-120795-5**

**Date Collected: 11/30/16 10:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 23:29	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 18:44	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:40	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:10	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 20:34 (End) 12/02/16 20:41	JBK	TAL CHI
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B29 (0-5)**

**Lab Sample ID: 500-120795-5**

**Date Collected: 11/30/16 10:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 87.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363464	12/03/16 12:30	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/09/16 22:54	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 19:05	PJ1	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		10	363828	12/06/16 13:16	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 12:48	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B21 (0-6)**

**Lab Sample ID: 500-120795-6**

**Date Collected: 11/30/16 11:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 23:36	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 19:00	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:43	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:15	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480		JBJ	TAL CHI
					(Start)	12/02/16 20:41		
					(End)	12/02/16 20:48		
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B21 (0-6)**

**Lab Sample ID: 500-120795-6**

**Date Collected: 11/30/16 11:05**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 85.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363464	12/03/16 12:54	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/09/16 23:23	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 19:10	PJ1	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		10	363828	12/06/16 13:33	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 12:50	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B25 (0-8.2)**

**Lab Sample ID: 500-120795-7**

**Date Collected: 11/30/16 12:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 23:43	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 19:05	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B25 (0-8.2)**

**Lab Sample ID: 500-120795-7**

**Date Collected: 11/30/16 12:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:46	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:16	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 20:48 (End) 12/02/16 20:55	JB	TAL CHI
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B25 (0-8.2)**

**Lab Sample ID: 500-120795-7**

**Date Collected: 11/30/16 12:25**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 84.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363464	12/03/16 13:19	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/09/16 23:52	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 19:14	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 12:57	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B26 (0-2)**

**Lab Sample ID: 500-120795-8**

**Date Collected: 11/30/16 12:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 23:49	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 19:09	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:50	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:18	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B26 (0-2)**

**Lab Sample ID: 500-120795-8**

**Date Collected: 11/30/16 12:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	363480	12/02/16 20:55 (Start) 12/02/16 21:03 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B26 (0-2)**

**Lab Sample ID: 500-120795-8**

**Date Collected: 11/30/16 12:50**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 90.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363464	12/03/16 13:44	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/10/16 02:18	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 19:19	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 12:59	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B24 (0-4.5)**

**Lab Sample ID: 500-120795-9**

**Date Collected: 11/30/16 13:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 23:56	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 19:14	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:53	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:19	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	12/02/16 21:03 (Start) 12/02/16 21:10 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B24 (0-4.5)**

**Lab Sample ID: 500-120795-9**

**Date Collected: 11/30/16 13:15**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 88.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363464	12/03/16 14:09	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/10/16 00:22	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 19:23	PJ1	TAL CHI
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 13:01	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B23 (0-8)**

**Lab Sample ID: 500-120795-10**

**Date Collected: 11/30/16 13:35**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363483	12/03/16 15:40	RMP	TAL CHI
SPLP East	Prep	3010A			363751	12/06/16 08:03	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 00:03	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6010B		1	363731	12/05/16 19:19	PJ1	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	3010A			363611	12/05/16 10:49	JEF	TAL CHI
TCLP	Analysis	6020A		1	363952	12/06/16 17:57	FXG	TAL CHI
TCLP	Leach	1311			363481	12/03/16 15:40	RMP	TAL CHI
TCLP	Prep	7470A			363704	12/05/16 17:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	363785	12/06/16 09:21	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363480	(Start) 12/02/16 21:10 (End) 12/02/16 21:17	JBK	TAL CHI
Total/NA	Analysis	Moisture		1	363206	12/01/16 15:32	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B23 (0-8)**

**Lab Sample ID: 500-120795-10**

**Date Collected: 11/30/16 13:35**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 89.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363272	12/01/16 16:55	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363464	12/03/16 14:33	BDW	TAL CHI
Total/NA	Prep	3541			364110	12/08/16 07:31	STW	TAL CHI
Total/NA	Analysis	8270D		1	364469	12/10/16 00:51	GES	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		1	363733	12/05/16 19:35	PJ1	TAL CHI
Total/NA	Prep	3050B			363571	12/05/16 08:55	JEF	TAL CHI
Total/NA	Analysis	6010B		10	363828	12/06/16 13:37	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

**Client Sample ID: 1314V3-01-B23 (0-8)**

**Lab Sample ID: 500-120795-10**

**Date Collected: 11/30/16 13:35**

**Matrix: Solid**

**Date Received: 12/01/16 09:25**

**Percent Solids: 89.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			363363	12/02/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363653	12/05/16 13:03	MJD	TAL CHI

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Certification Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120795-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference#: \_\_\_\_\_

## Chain of Custody Record



Lab Job #: 500-120795  
 Chain of Custody Number: ES46-08  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: 4.8-7.45

Client		Client Project #		Preservative		Parameter										Preservative Key	
EE		1009008-004601														 14° 4° 8° to 4° 500-120795 COC	
Project Name		Lab Project #															
IT74		50012744															
Project Location/State		Lab PM															
Peck Island County, IL		D. Wright															
Sampler																	
S. Cooper																	
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVE	Total TA	1mm	From TA	down	P. 100 (g) Ad	Comments			
			Date	Time													
1		1314V3-01-1338 (0-4)	11-30-16	0755	2	S	X	X	X	X	X	X	X	64E26			
2		1314V3-01-1339 (0-4)	11-30-16	0815	2	S	X	X	X	X	X	X	X				
3		1314V3-01-1332 (0-6)	11-30-16	0950	2	S	X	X	X	X	X	X	X				
4		1314V3-01-1333 (0-2.5)	11-30-16	1005	2	S	X	X	X	X	X	X	X				
5		1314V3-01-1329 (0-5)	11-30-16	1025	2	S	X	X	X	X	X	X	X				
6		1314V3-01-1321 (0-6)	11-30-16	1105	2	S	X	X	X	X	X	X	X				
7		1314V3-01-1325 (0-8.2)	11-30-16	1225	2	S	X	X	X	X	X	X	X				
8		1314V3-01-1326 (0-2)	11-30-16	1250	2	S	X	X	X	X	X	X	X				
9		1314V3-01-1324 (0-4.5)	11-30-16	1315	2	S	X	X	X	X	X	X	X				
10		1314V3-01-1323 (0-8)	11-30-16	1335	2	S	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
	EE	11-30-16	1730		TA/MT	12/01/16	0925
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier \_\_\_\_\_  
 Shipped FX Priority  
 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: 500-120795-1

**Login Number: 120795**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-120795-1

**Login Number: 120795**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-120882-1  
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



Authorized for release by:  
12/16/2016 3:58:48 PM

Richard Wright, Senior Project Manager  
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### LINKS

Review your project  
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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

## 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

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: 1314V3-56-B03 (0-3) (Continued)

## Lab Sample ID: 500-120882-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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

## Client Sample ID: 1314V3-56-B02 (0-3)

## Lab Sample ID: 500-120882-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.017	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.016	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.010	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.012	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.026	J	0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.039	0.0077	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
Antimony	0.28	J	0.96	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.1		0.48	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	63		0.48	0.088	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.19	0.042	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7		2.4	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.096	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	5200		9.6	3.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.48	0.083	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		9.6	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	9.4		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2600		4.8	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	400		0.48	0.095	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	850		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	1300		48	6.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.82		0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.24	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		0.96	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.079	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.29		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.029	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.81		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		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: 500-120882-1

**Client Sample ID: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.056		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.013	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.11		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.082		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	0.047		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.071		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.027	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.052		0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.026	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.020	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	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	62		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	5200		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	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	9.7		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	9.8		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2700		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	12	B	0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	800		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	1300		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.72		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	26		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.075	J	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.31	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.25		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.59		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

**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

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: 1314V3-56-B01 (0-3) (Continued)

## Lab Sample ID: 500-120882-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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

## 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

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: 1314V3-59-B01 (0-5) (Continued)

## Lab Sample ID: 500-120882-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
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

## 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

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: 1314V3-32-B08 (0-3) (Continued)

## Lab Sample ID: 500-120882-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
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

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: 1314V3-32-B07 (0-3) (Continued)

## Lab Sample ID: 500-120882-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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

## 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

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: 1314V3-26-B01 (0-8) (Continued)

## Lab Sample ID: 500-120882-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
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

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.012	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.015	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0088	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.011	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.016	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.37	J	1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.3		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.51	0.094	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	4.3		2.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.32		0.10	0.030	mg/Kg	1	☼	6010B	Total/NA
Calcium	39000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.51	0.088	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.7		0.26	0.058	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	9.7		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	14	B	0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		26	4.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	1300		51	6.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.71		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.26	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.012	J	0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	9.7		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B31 (0-6)**

**Lab Sample ID: 500-120882-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.011	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	J	0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.020	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0096	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.010	J	0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.021	J	0.036	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.011	J	0.036	0.0069	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.29	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.1		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	3.9		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	40000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.56	0.097	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Client Sample ID: 1314V3-01-B31 (0-6) (Continued)

## Lab Sample ID: 500-120882-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	6.6		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	6.7		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14	B	0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	1000		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.94		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	28		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.59		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B20 (0-6)

## Lab Sample ID: 500-120882-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0087	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	J	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.018	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0098	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.011	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.022	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.011	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.37	J	0.90	0.19	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.2		0.45	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	71		0.45	0.082	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.18	0.039	mg/Kg	1	☼	6010B	Total/NA
Boron	3.0		2.2	0.31	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35		0.090	0.026	mg/Kg	1	☼	6010B	Total/NA
Calcium	22000		9.0	2.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.45	0.077	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.45	0.097	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		9.0	3.5	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.22	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		4.5	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.45	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	13	B	0.45	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		22	3.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		45	5.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.93		0.45	0.22	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B20 (0-6) (Continued)**

**Lab Sample ID: 500-120882-16**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Vanadium	18		0.22	0.065	mg/Kg	1		☼	6010B	Total/NA
Zinc	39		0.90	0.28	mg/Kg	1		☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1			6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1			6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1			6010B	TCLP
Manganese	0.44		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.015	J	0.016	0.0086	mg/Kg	1		☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1			9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Method Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

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: 500-120882-1

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
500-120882-4	1314V3-56-B03 (0-3)	Solid	12/01/16 10:35	12/02/16 10:10
500-120882-5	1314V3-56-B02 (0-3)	Solid	12/01/16 10:50	12/02/16 10:10
500-120882-6	1314V3-56-B02 (0-3)D	Solid	12/01/16 10:50	12/02/16 10:10
500-120882-7	1314V3-56-B01 (0-3)	Solid	12/01/16 11:05	12/02/16 10:10
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
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
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
500-120882-14	1314V3-01-B30 (0-6)	Solid	12/01/16 16:10	12/02/16 10:10
500-120882-15	1314V3-01-B31 (0-6)	Solid	12/01/16 16:20	12/02/16 10:10
500-120882-16	1314V3-01-B20 (0-6)	Solid	12/01/16 16:45	12/02/16 10:10

# 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-Dichloropropene, 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
<b>Phenanthrene</b>	<b>0.0085</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.021</b>	<b>J</b>	0.038	0.0070	mg/Kg	☼	12/10/16 09:29	12/13/16 23:58	1
<b>Pyrene</b>	<b>0.020</b>	<b>J</b>	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
<b>Benzo[a]anthracene</b>	<b>0.012</b>	<b>J</b>	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
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	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
<b>Benzo[b]fluoranthene</b>	<b>0.021</b>	<b>J</b>	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
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.014</b>	<b>J</b>	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
<b>Antimony</b>	<b>0.32</b>	<b>J F1</b>	1.1	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Arsenic</b>	<b>5.0</b>	<b>F1</b>	0.55	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Barium</b>	<b>73</b>	<b>F1</b>	0.55	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Beryllium</b>	<b>0.45</b>		0.22	0.048	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Boron</b>	<b>3.0</b>	<b>F1</b>	2.8	0.39	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Cadmium</b>	<b>0.22</b>	<b>F1</b>	0.11	0.032	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Calcium</b>	<b>11000</b>	<b>F2</b>	11	3.6	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Chromium</b>	<b>12</b>	<b>B</b>	0.55	0.095	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Cobalt</b>	<b>5.3</b>	<b>F1</b>	0.28	0.063	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Copper</b>	<b>17</b>	<b>F1</b>	0.55	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Iron</b>	<b>12000</b>		11	4.3	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Lead</b>	<b>14</b>	<b>F1</b>	0.28	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Magnesium</b>	<b>6600</b>	<b>F2</b>	5.5	2.3	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Manganese</b>	<b>360</b>		0.55	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Nickel</b>	<b>11</b>	<b>B F1</b>	0.55	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Potassium</b>	<b>870</b>	<b>F1</b>	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
<b>Sodium</b>	<b>780</b>		55	7.3	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Thallium</b>	<b>0.77</b>		0.55	0.27	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Vanadium</b>	<b>20</b>		0.28	0.081	mg/Kg	☼	12/07/16 08:30	12/07/16 16:25	1
<b>Zinc</b>	<b>33</b>	<b>F1</b>	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
<b>Barium</b>	<b>0.59</b>		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
<b>Boron</b>	<b>0.072</b>	<b>J</b>	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
<b>Cadmium</b>	<b>0.0022</b>	<b>J</b>	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
<b>Manganese</b>	<b>1.9</b>		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 14:18	1
<b>Nickel</b>	<b>0.030</b>		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
<b>Zinc</b>	<b>0.040</b>	<b>J B</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
<b>Manganese</b>	<b>0.70</b>		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
<b>Mercury</b>	<b>0.029</b>		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
<b>pH</b>	<b>8.7</b>		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
<b>Naphthalene</b>	<b>0.023</b>	<b>J</b>	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
<b>2-Methylnaphthalene</b>	<b>0.0098</b>	<b>J</b>	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
<b>Acenaphthylene</b>	<b>0.0060</b>	<b>J</b>	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
<b>Acenaphthene</b>	<b>0.016</b>	<b>J</b>	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
<b>Fluorene</b>	<b>0.014</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.14</b>		0.037	0.0051	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
<b>Anthracene</b>	<b>0.034</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.22</b>		0.037	0.0068	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
<b>Pyrene</b>	<b>0.20</b>		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
<b>Benzo[a]anthracene</b>	<b>0.12</b>		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
<b>Chrysene</b>	<b>0.11</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.17</b>		0.037	0.0080	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
<b>Benzo[k]fluoranthene</b>	<b>0.075</b>		0.037	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
<b>Benzo[a]pyrene</b>	<b>0.16</b>		0.037	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.082</b>		0.037	0.0096	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
<b>Dibenz(a,h)anthracene</b>	<b>0.026</b>	<b>J</b>	0.037	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 00:23	1
<b>Benzo[g,h,i]perylene</b>	<b>0.074</b>		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
<b>Antimony</b>	<b>0.45</b>	<b>J</b>	0.99	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Arsenic</b>	<b>3.9</b>		0.49	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Barium</b>	<b>68</b>		0.49	0.090	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Beryllium</b>	<b>0.43</b>		0.20	0.043	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Boron</b>	<b>2.6</b>		2.5	0.35	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Cadmium</b>	<b>0.25</b>		0.099	0.029	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Calcium</b>	<b>14000</b>		9.9	3.2	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.49	0.085	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Cobalt</b>	<b>5.3</b>		0.25	0.056	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Copper</b>	<b>12</b>		0.49	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Iron</b>	<b>12000</b>		9.9	3.8	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Lead</b>	<b>52</b>		0.25	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Magnesium</b>	<b>7800</b>		4.9	2.0	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Manganese</b>	<b>370</b>		0.49	0.098	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Nickel</b>	<b>12</b>	<b>B</b>	0.49	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Potassium</b>	<b>750</b>		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
<b>Sodium</b>	<b>420</b>		49	6.5	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Thallium</b>	<b>0.72</b>		0.49	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Vanadium</b>	<b>18</b>		0.25	0.072	mg/Kg	☼	12/07/16 08:30	12/07/16 16:59	1
<b>Zinc</b>	<b>47</b>		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
<b>Barium</b>	<b>0.75</b>		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
<b>Boron</b>	<b>0.064</b>	<b>J</b>	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
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	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
<b>Lead</b>	<b>0.011</b>		0.0075	0.0075	mg/L	-	12/06/16 14:16	12/07/16 14:22	1
<b>Manganese</b>	<b>0.60</b>		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
<b>Zinc</b>	<b>0.061</b>	<b>J B</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
<b>Lead</b>	<b>0.15</b>		0.0075	0.0075	mg/L	-	12/06/16 14:13	12/07/16 19:55	1
<b>Manganese</b>	<b>0.21</b>		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	<b>0.11</b>		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
<b>pH</b>	<b>8.4</b>		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-Dichloropropene, 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

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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-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
<b>Acenaphthene</b>	<b>0.012</b>	<b>J</b>	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
<b>Fluorene</b>	<b>0.014</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.26</b>		0.039	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
<b>Anthracene</b>	<b>0.036</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.43</b>		0.039	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
<b>Pyrene</b>	<b>0.36</b>		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
<b>Benzo[a]anthracene</b>	<b>0.18</b>		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
<b>Chrysene</b>	<b>0.21</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.33</b>		0.039	0.0085	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
<b>Benzo[k]fluoranthene</b>	<b>0.12</b>		0.039	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
<b>Benzo[a]pyrene</b>	<b>0.22</b>		0.039	0.0076	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.094</b>		0.039	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
<b>Dibenz(a,h)anthracene</b>	<b>0.034</b>	<b>J</b>	0.039	0.0076	mg/Kg	☼	12/10/16 09:29	12/14/16 02:06	1
<b>Benzo[g,h,i]perylene</b>	<b>0.078</b>		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
<b>Antimony</b>	<b>0.43</b>	<b>J</b>	1.2	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Arsenic</b>	<b>3.7</b>		0.60	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Barium</b>	<b>91</b>		0.60	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Beryllium</b>	<b>0.60</b>		0.24	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Boron</b>	<b>5.1</b>		3.0	0.42	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Cadmium</b>	<b>0.50</b>		0.12	0.035	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Calcium</b>	<b>7200</b>		12	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Chromium</b>	<b>14</b>	<b>B</b>	0.60	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Cobalt</b>	<b>5.5</b>		0.30	0.068	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Copper</b>	<b>15</b>		0.60	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Iron</b>	<b>14000</b>		12	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Lead</b>	<b>66</b>		0.30	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Magnesium</b>	<b>2600</b>		6.0	2.4	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Manganese</b>	<b>330</b>		0.60	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Nickel</b>	<b>13</b>	<b>B</b>	0.60	0.16	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Potassium</b>	<b>910</b>		30	4.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Selenium</b>	<b>0.38</b>	<b>J</b>	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
<b>Sodium</b>	<b>210</b>		60	7.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Thallium</b>	<b>0.78</b>		0.60	0.29	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Vanadium</b>	<b>17</b>		0.30	0.087	mg/Kg	☼	12/07/16 08:30	12/07/16 17:06	1
<b>Zinc</b>	<b>85</b>		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
<b>Barium</b>	<b>0.48</b>	<b>J</b>	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
<b>Boron</b>	<b>0.11</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.14</b>		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
<b>Zinc</b>	<b>0.075</b>	<b>J B</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
<b>Mercury</b>	<b>0.19</b>		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
<b>pH</b>	<b>8.1</b>		0.2	0.2	SU	-		12/06/16 14:58	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: 1314V3-56-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: 500-120882-1

**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: 500-120882-1

**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
<b>Arsenic</b>	<b>4.1</b>		0.49	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Barium</b>	<b>80</b>		0.49	0.090	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Beryllium</b>	<b>0.47</b>		0.20	0.042	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Boron</b>	<b>2.7</b>		2.5	0.34	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Cadmium</b>	<b>0.12</b>		0.098	0.028	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Calcium</b>	<b>3300</b>		9.8	3.2	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Chromium</b>	<b>12 B</b>		0.49	0.084	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Cobalt</b>	<b>5.6</b>		0.25	0.055	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Copper</b>	<b>8.6</b>		0.49	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Iron</b>	<b>12000</b>		9.8	3.8	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Lead</b>	<b>6.7</b>		0.25	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Magnesium</b>	<b>1600</b>		4.9	2.0	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Manganese</b>	<b>500</b>		0.49	0.097	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Nickel</b>	<b>11 B</b>		0.49	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Potassium</b>	<b>800</b>		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
<b>Sodium</b>	<b>260</b>		49	6.5	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Thallium</b>	<b>0.95</b>		0.49	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Vanadium</b>	<b>19</b>		0.25	0.072	mg/Kg	☼	12/07/16 08:30	12/07/16 17:13	1
<b>Zinc</b>	<b>24</b>		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
<b>Barium</b>	<b>0.43</b>	<b>J</b>	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
<b>Boron</b>	<b>0.092</b>	<b>J</b>	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: 500-120882-1

**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
<b>Iron</b>	<b>0.21</b>	<b>J</b>	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
<b>Manganese</b>	<b>1.7</b>		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
<b>Manganese</b>	<b>0.34</b>		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
<b>Mercury</b>	<b>0.014</b>	<b>J</b>	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
<b>pH</b>	<b>8.2</b>		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: 500-120882-1

**Client Sample ID: 1314V3-56-B02 (0-3)**

**Lab Sample ID: 500-120882-5**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 83.5**

## 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 15:19	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Carbon disulfide	<0.0046		0.0046	0.00097	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/02/16 16:10	12/06/16 15:19	1
Dibromofluoromethane	98		75 - 120	12/02/16 16:10	12/06/16 15:19	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/02/16 16:10	12/06/16 15:19	1
Toluene-d8 (Surr)	101		75 - 123	12/02/16 16:10	12/06/16 15:19	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 02:57	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 09:29	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: 500-120882-1

**Client Sample ID: 1314V3-56-B02 (0-3)**

**Lab Sample ID: 500-120882-5**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**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	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
<b>Fluoranthene</b>	<b>0.017</b>	<b>J</b>	0.039	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
<b>Pyrene</b>	<b>0.016</b>	<b>J</b>	0.039	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
<b>Benzo[a]anthracene</b>	<b>0.010</b>	<b>J</b>	0.039	0.0053	mg/Kg	☼	12/10/16 09:29	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: 500-120882-1

**Client Sample ID: 1314V3-56-B02 (0-3)**

**Lab Sample ID: 500-120882-5**

Date Collected: 12/01/16 10:50

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 83.5

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.012</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
<b>Benzo[b]fluoranthene</b>	<b>0.026</b>	<b>J</b>	0.039	0.0085	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
<b>Benzo[a]pyrene</b>	<b>0.013</b>	<b>J</b>	0.039	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.013</b>	<b>J</b>	0.039	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 02:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	91		40 - 130				12/10/16 09:29	12/14/16 02:57	1
Phenol-d5	86		36 - 123				12/10/16 09:29	12/14/16 02:57	1
Nitrobenzene-d5	78		33 - 124				12/10/16 09:29	12/14/16 02:57	1
2-Fluorobiphenyl	75		42 - 115				12/10/16 09:29	12/14/16 02:57	1
2,4,6-Tribromophenol	55		25 - 130				12/10/16 09:29	12/14/16 02:57	1
Terphenyl-d14	88		25 - 150				12/10/16 09:29	12/14/16 02:57	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.28</b>	<b>J</b>	0.96	0.20	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Arsenic</b>	<b>5.1</b>		0.48	0.22	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Barium</b>	<b>63</b>		0.48	0.088	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Beryllium</b>	<b>0.49</b>		0.19	0.042	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Boron</b>	<b>2.7</b>		2.4	0.34	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Cadmium</b>	<b>0.17</b>		0.096	0.028	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Calcium</b>	<b>5200</b>		9.6	3.1	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.48	0.083	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Cobalt</b>	<b>6.1</b>		0.24	0.054	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Copper</b>	<b>10</b>		0.48	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Iron</b>	<b>14000</b>		9.6	3.7	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Lead</b>	<b>9.4</b>		0.24	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Magnesium</b>	<b>2600</b>		4.8	1.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Manganese</b>	<b>400</b>		0.48	0.095	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Nickel</b>	<b>12</b>	<b>B</b>	0.48	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Potassium</b>	<b>850</b>		24	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
Selenium	<0.48		0.48	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
Silver	<0.24		0.24	0.056	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Sodium</b>	<b>1300</b>		48	6.3	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Thallium</b>	<b>0.82</b>		0.48	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Vanadium</b>	<b>21</b>		0.24	0.070	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1
<b>Zinc</b>	<b>28</b>		0.96	0.30	mg/Kg	☼	12/07/16 08:30	12/07/16 17:35	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.58</b>		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:37	1
<b>Boron</b>	<b>0.079</b>	<b>J</b>	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:37	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-56-B02 (0-3)**

**Lab Sample ID: 500-120882-5**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 83.5**

**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 14:37	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:37	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:37	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 14:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 14:37	1
<b>Manganese</b>	<b>0.29</b>		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:37	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:37	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 14:37	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:37	1
<b>Zinc</b>	<b>0.029</b>	<b>J B</b>	0.50	0.020	mg/L		12/06/16 14:16	12/07/16 14:37	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.81</b>		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 20:31	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		12/06/16 14:16	12/07/16 19:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 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		12/06/16 13:45	12/07/16 10:21	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.018	0.0093	mg/Kg	☼	12/05/16 14:30	12/06/16 14:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.9</b>		0.2	0.2	SU			12/06/16 15:05	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: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 83.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 15:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/02/16 16:10	12/06/16 15:44	1
Dibromofluoromethane	100		75 - 120	12/02/16 16:10	12/06/16 15:44	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/02/16 16:10	12/06/16 15:44	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 16:10	12/06/16 15:44	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.086	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	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: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 83.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2-Methylnaphthalene	<0.078		0.078	0.0072	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,4-Dinitrophenol	<0.78		0.78	0.69	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Phenanthrene</b>	<b>0.056</b>		0.039	0.0054	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Anthracene</b>	<b>0.013 J</b>		0.039	0.0065	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Fluoranthene</b>	<b>0.11</b>		0.039	0.0072	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Pyrene</b>	<b>0.082</b>		0.039	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Benzo[a]anthracene</b>	<b>0.048</b>		0.039	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	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: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

Date Collected: 12/01/16 10:50

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 83.9

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.047</b>		0.039	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Benzo[b]fluoranthene</b>	<b>0.071</b>		0.039	0.0084	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Benzo[k]fluoranthene</b>	<b>0.027 J</b>		0.039	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Benzo[a]pyrene</b>	<b>0.052</b>		0.039	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.026 J</b>		0.039	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Benzo[g,h,i]perylene</b>	<b>0.020 J</b>		0.039	0.013	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 03:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	107		40 - 130				12/10/16 09:29	12/14/16 03:23	1
Phenol-d5	104		36 - 123				12/10/16 09:29	12/14/16 03:23	1
Nitrobenzene-d5	96		33 - 124				12/10/16 09:29	12/14/16 03:23	1
2-Fluorobiphenyl	82		42 - 115				12/10/16 09:29	12/14/16 03:23	1
2,4,6-Tribromophenol	40		25 - 130				12/10/16 09:29	12/14/16 03:23	1
Terphenyl-d14	100		25 - 150				12/10/16 09:29	12/14/16 03:23	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.25 J</b>		1.1	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Arsenic</b>	<b>4.6</b>		0.56	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Barium</b>	<b>62</b>		0.56	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Beryllium</b>	<b>0.48</b>		0.23	0.049	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Boron</b>	<b>2.6 J</b>		2.8	0.39	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Cadmium</b>	<b>0.11</b>		0.11	0.033	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Calcium</b>	<b>5200</b>		11	3.6	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Chromium</b>	<b>12 B</b>		0.56	0.097	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Cobalt</b>	<b>5.3</b>		0.28	0.064	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Copper</b>	<b>9.7</b>		0.56	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Iron</b>	<b>13000</b>		11	4.3	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Lead</b>	<b>9.8</b>		0.28	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Magnesium</b>	<b>2700</b>		5.6	2.3	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Manganese</b>	<b>370</b>		0.56	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Nickel</b>	<b>12 B</b>		0.56	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Potassium</b>	<b>800</b>		28	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Sodium</b>	<b>1300</b>		56	7.4	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Thallium</b>	<b>0.72</b>		0.56	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Vanadium</b>	<b>20</b>		0.28	0.082	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1
<b>Zinc</b>	<b>26</b>		1.1	0.36	mg/Kg	☼	12/07/16 08:30	12/07/16 17:42	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.56</b>		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 14:42	1
<b>Boron</b>	<b>0.075 J</b>		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 14:42	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: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 83.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:16	12/07/16 14:42	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:42	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:42	1
<b>Iron</b>	<b>0.31</b>	<b>J</b>	0.40	0.20	mg/L		12/06/16 14:16	12/07/16 14:42	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 14:42	1
<b>Manganese</b>	<b>0.25</b>		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:42	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:42	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 14:42	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:42	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 14:42	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 20:38	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		12/06/16 14:16	12/07/16 19:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 19:39	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:23	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.019</b>		0.018	0.0094	mg/Kg	☼	12/05/16 14:30	12/06/16 14:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU			12/06/16 15:09	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: 1314V3-56-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
1,1,2,2-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: 500-120882-1

**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: 500-120882-1

**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: 500-120882-1

**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
<b>Iron</b>	<b>0.34</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.21</b>		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
<b>Zinc</b>	<b>0.022</b>	<b>J B</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
<b>Manganese</b>	<b>0.76</b>		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
<b>Mercury</b>	<b>0.018</b>		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
<b>pH</b>	<b>8.0</b>		0.2	0.2	SU			12/06/16 15:12	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: 1314V3-59-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: 500-120882-1

**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
<b>Phenanthrene</b>	<b>0.0056</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.039	0.0074	mg/Kg	☼	12/10/16 09:29	12/14/16 04:14	1
<b>Pyrene</b>	<b>0.011</b>	<b>J</b>	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
<b>Benzo[a]anthracene</b>	<b>0.0075</b>	<b>J</b>	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: 500-120882-1

**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
<b>Benzo[b]fluoranthene</b>	<b>0.016</b>	<b>J</b>	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
<b>Benzo[a]pyrene</b>	<b>0.0090</b>	<b>J</b>	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
<b>Antimony</b>	<b>0.28</b>	<b>J</b>	1.0	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Arsenic</b>	<b>6.5</b>		0.51	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Barium</b>	<b>67</b>		0.51	0.092	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Beryllium</b>	<b>0.49</b>		0.20	0.044	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Boron</b>	<b>2.7</b>		2.5	0.35	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Cadmium</b>	<b>0.29</b>		0.10	0.029	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Calcium</b>	<b>7400</b>		10	3.3	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Chromium</b>	<b>14</b>	<b>B</b>	0.51	0.087	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Cobalt</b>	<b>6.8</b>		0.25	0.057	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Copper</b>	<b>11</b>		0.51	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Iron</b>	<b>14000</b>		10	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Lead</b>	<b>14</b>		0.25	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Magnesium</b>	<b>4900</b>		5.1	2.1	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Manganese</b>	<b>460</b>		0.51	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Nickel</b>	<b>15</b>	<b>B</b>	0.51	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Potassium</b>	<b>780</b>		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
<b>Sodium</b>	<b>180</b>		51	6.7	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Thallium</b>	<b>1.0</b>		0.51	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Vanadium</b>	<b>27</b>		0.25	0.074	mg/Kg	☼	12/07/16 08:30	12/07/16 17:55	1
<b>Zinc</b>	<b>36</b>		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
<b>Barium</b>	<b>0.56</b>		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
<b>Boron</b>	<b>0.063</b>	<b>J</b>	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: 500-120882-1

**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
<b>Manganese</b>	<b>0.35</b>		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
<b>Manganese</b>	<b>0.23</b>		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
<b>Mercury</b>	<b>0.013</b>	<b>J</b>	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
<b>pH</b>	<b>8.2</b>		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: 500-120882-1

**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: 500-120882-1

**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: 500-120882-1

**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: 500-120882-1

**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
<b>Cobalt</b>	<b>0.035</b>		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
<b>Manganese</b>	<b>2.4</b>		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:56	1
<b>Nickel</b>	<b>0.034</b>		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 14:56	1
<b>Selenium</b>	<b>0.025 J</b>		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
<b>Zinc</b>	<b>0.026 J B</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
<b>Manganese</b>	<b>0.18</b>		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
<b>pH</b>	<b>8.3</b>		0.2	0.2	SU			12/06/16 15:19	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: 1314V3-32-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: 500-120882-1

**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
<b>Phenanthrene</b>	<b>0.035</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.052</b>		0.041	0.0076	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
<b>Pyrene</b>	<b>0.045</b>		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
<b>Benzo[a]anthracene</b>	<b>0.028</b>	<b>J</b>	0.041	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1

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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: 1314V3-32-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
<b>Chrysene</b>	<b>0.028</b>	<b>J</b>	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
<b>Benzo[b]fluoranthene</b>	<b>0.047</b>		0.041	0.0088	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
<b>Benzo[k]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.041	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
<b>Benzo[a]pyrene</b>	<b>0.032</b>	<b>J</b>	0.041	0.0079	mg/Kg	☼	12/10/16 09:29	12/14/16 05:05	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.017</b>	<b>J</b>	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
<b>Antimony</b>	<b>0.29</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Arsenic</b>	<b>3.1</b>		0.54	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Barium</b>	<b>83</b>		0.54	0.098	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Beryllium</b>	<b>0.54</b>		0.21	0.046	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Boron</b>	<b>3.3</b>		2.7	0.37	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Cadmium</b>	<b>0.18</b>		0.11	0.031	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Calcium</b>	<b>7400</b>		11	3.5	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.54	0.092	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Cobalt</b>	<b>4.3</b>		0.27	0.061	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Copper</b>	<b>11</b>		0.54	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Iron</b>	<b>12000</b>		11	4.1	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Lead</b>	<b>18</b>		0.27	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Magnesium</b>	<b>2100</b>		5.4	2.2	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Manganese</b>	<b>250</b>		0.54	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Nickel</b>	<b>11</b>	<b>B</b>	0.54	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Potassium</b>	<b>830</b>		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
<b>Sodium</b>	<b>520</b>		54	7.1	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Thallium</b>	<b>0.67</b>		0.54	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Vanadium</b>	<b>19</b>		0.27	0.078	mg/Kg	☼	12/07/16 08:30	12/07/16 18:09	1
<b>Zinc</b>	<b>42</b>		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
<b>Barium</b>	<b>0.43</b>	<b>J</b>	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
<b>Boron</b>	<b>0.071</b>	<b>J</b>	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: 500-120882-1

**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
<b>Manganese</b>	<b>0.14</b>		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
<b>Zinc</b>	<b>0.027</b>	<b>J B</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
<b>Mercury</b>	<b>2.0</b>		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
<b>pH</b>	<b>8.9</b>		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: 500-120882-1

**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: 500-120882-1

**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
<b>Phenanthrene</b>	<b>0.040</b>	<b>J</b>	0.042	0.0058	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
<b>Anthracene</b>	<b>0.0089</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.086</b>		0.042	0.0078	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
<b>Pyrene</b>	<b>0.072</b>		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
<b>Benzo[a]anthracene</b>	<b>0.046</b>		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: 500-120882-1

**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
<b>Chrysene</b>	<b>0.041</b>	<b>J</b>	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
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.49</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.063</b>		0.042	0.0090	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
<b>Benzo[k]fluoranthene</b>	<b>0.028</b>	<b>J</b>	0.042	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
<b>Benzo[a]pyrene</b>	<b>0.046</b>		0.042	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:31	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.021</b>	<b>J</b>	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
<b>Antimony</b>	<b>0.41</b>	<b>J</b>	1.2	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Arsenic</b>	<b>4.3</b>		0.62	0.29	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Barium</b>	<b>86</b>		0.62	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Beryllium</b>	<b>0.56</b>		0.25	0.053	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Boron</b>	<b>3.0</b>	<b>J</b>	3.1	0.43	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Cadmium</b>	<b>0.24</b>		0.12	0.036	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Calcium</b>	<b>3700</b>		12	4.0	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Chromium</b>	<b>15</b>	<b>B</b>	0.62	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Cobalt</b>	<b>5.7</b>		0.31	0.070	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Copper</b>	<b>16</b>		0.62	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Iron</b>	<b>14000</b>		12	4.8	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Lead</b>	<b>32</b>		0.31	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Magnesium</b>	<b>1800</b>		6.2	2.5	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Manganese</b>	<b>410</b>		0.62	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Nickel</b>	<b>12</b>	<b>B</b>	0.62	0.17	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Potassium</b>	<b>910</b>		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
<b>Sodium</b>	<b>430</b>		62	8.2	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Thallium</b>	<b>0.90</b>		0.62	0.30	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Vanadium</b>	<b>22</b>		0.31	0.090	mg/Kg	☼	12/07/16 08:30	12/07/16 18:16	1
<b>Zinc</b>	<b>46</b>		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
<b>Barium</b>	<b>0.28</b>	<b>J</b>	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
<b>Boron</b>	<b>0.078</b>	<b>J</b>	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: 500-120882-1

**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
<b>Iron</b>	<b>0.39</b>	<b>J</b>	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
<b>Zinc</b>	<b>0.028</b>	<b>J B</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
<b>Mercury</b>	<b>0.067</b>		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
<b>pH</b>	<b>8.5</b>		0.2	0.2	SU			12/06/16 15:27	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: 1314V3-26-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: 500-120882-1

**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
<b>Naphthalene</b>	<b>0.0078</b>	<b>J</b>	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
<b>2-Methylnaphthalene</b>	<b>0.013</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.043</b>		0.041	0.0058	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
<b>Anthracene</b>	<b>0.0070</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.071</b>		0.041	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
<b>Pyrene</b>	<b>0.069</b>		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
<b>Benzo[a]anthracene</b>	<b>0.040</b>	<b>J</b>	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: 500-120882-1

**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
<b>Chrysene</b>	<b>0.045</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.091</b>		0.041	0.0090	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
<b>Benzo[k]fluoranthene</b>	<b>0.029 J</b>		0.041	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
<b>Benzo[a]pyrene</b>	<b>0.050</b>		0.041	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.027 J</b>		0.041	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
<b>Dibenz(a,h)anthracene</b>	<b>0.012 J</b>		0.041	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 05:57	1
<b>Benzo[g,h,i]perylene</b>	<b>0.020 J</b>		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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Antimony</b>	<b>0.43 J</b>		1.2	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Arsenic</b>	<b>2.7</b>		0.60	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Barium</b>	<b>110</b>		0.60	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Beryllium</b>	<b>0.56</b>		0.24	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Boron</b>	<b>7.2</b>		3.0	0.42	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Cadmium</b>	<b>0.31</b>		0.12	0.034	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Calcium</b>	<b>7700</b>		12	3.8	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Chromium</b>	<b>11 B</b>		0.60	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Cobalt</b>	<b>4.4</b>		0.30	0.067	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Copper</b>	<b>19</b>		0.60	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Iron</b>	<b>14000</b>		12	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Lead</b>	<b>21</b>		0.30	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Magnesium</b>	<b>2100</b>		6.0	2.4	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Manganese</b>	<b>290</b>		0.60	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Nickel</b>	<b>12 B</b>		0.60	0.16	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Potassium</b>	<b>1100</b>		30	4.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Selenium</b>	<b>0.33 J</b>		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
<b>Sodium</b>	<b>230</b>		60	7.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Thallium</b>	<b>0.70</b>		0.60	0.29	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Vanadium</b>	<b>14</b>		0.30	0.087	mg/Kg	☼	12/07/16 08:30	12/07/16 18:22	1
<b>Zinc</b>	<b>58</b>		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
<b>Barium</b>	<b>0.51</b>		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
<b>Boron</b>	<b>0.099 J</b>		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: 500-120882-1

**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
<b>Cadmium</b>	<b>0.0023</b>	<b>J</b>	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
<b>Manganese</b>	<b>1.1</b>		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
<b>Zinc</b>	<b>0.18</b>	<b>J B</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
<b>Manganese</b>	<b>0.050</b>		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
<b>Mercury</b>	<b>0.058</b>		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
<b>pH</b>	<b>8.2</b>		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: 500-120882-1

**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-Dichloropropane, 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: 500-120882-1

**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: 500-120882-1

**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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Antimony</b>	<b>0.25</b>	<b>J</b>	1.2	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Arsenic</b>	<b>2.5</b>		0.60	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Barium</b>	<b>79</b>		0.60	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Beryllium</b>	<b>0.49</b>		0.24	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Boron</b>	<b>2.8</b>	<b>J</b>	3.0	0.42	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Cadmium</b>	<b>0.22</b>		0.12	0.035	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Calcium</b>	<b>6000</b>		12	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.60	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Cobalt</b>	<b>5.3</b>		0.30	0.068	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Copper</b>	<b>9.3</b>		0.60	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Iron</b>	<b>14000</b>		12	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Lead</b>	<b>7.0</b>		0.30	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Magnesium</b>	<b>3200</b>		6.0	2.4	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Manganese</b>	<b>360</b>		0.60	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Nickel</b>	<b>12</b>	<b>B</b>	0.60	0.16	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Potassium</b>	<b>880</b>		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
<b>Sodium</b>	<b>150</b>		60	8.0	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Thallium</b>	<b>0.80</b>		0.60	0.30	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Vanadium</b>	<b>17</b>		0.30	0.088	mg/Kg	☼	12/07/16 08:30	12/07/16 18:29	1
<b>Zinc</b>	<b>32</b>		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
<b>Barium</b>	<b>0.45</b>	<b>J</b>	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
<b>Boron</b>	<b>0.084</b>	<b>J</b>	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: 500-120882-1

**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
<b>Iron</b>	<b>0.26</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.031</b>		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
<b>Selenium</b>	<b>0.020</b>	<b>J</b>	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	<b>0.013</b>	<b>J</b>	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	<b>8.2</b>		0.2	0.2	SU			12/06/16 15:34	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: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

**Date Collected: 12/01/16 16:10**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 85.5**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/02/16 16:10	12/06/16 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/02/16 16:10	12/06/16 19:06	1
Dibromofluoromethane	98		75 - 120	12/02/16 16:10	12/06/16 19:06	1
1,2-Dichloroethane-d4 (Surr)	112		69 - 134	12/02/16 16:10	12/06/16 19:06	1
Toluene-d8 (Surr)	100		75 - 123	12/02/16 16:10	12/06/16 19:06	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	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: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

**Date Collected: 12/01/16 16:10**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**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	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
<b>Fluoranthene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
<b>Pyrene</b>	<b>0.015</b>	<b>J</b>	0.037	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
<b>Benzo[a]anthracene</b>	<b>0.0088</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	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: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

**Date Collected: 12/01/16 16:10**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 85.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.011</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
<b>Benzo[b]fluoranthene</b>	<b>0.016</b>	<b>J</b>	0.037	0.0080	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 09:29	12/14/16 06:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		40 - 130	12/10/16 09:29	12/14/16 06:48	1
Phenol-d5	103		36 - 123	12/10/16 09:29	12/14/16 06:48	1
Nitrobenzene-d5	92		33 - 124	12/10/16 09:29	12/14/16 06:48	1
2-Fluorobiphenyl	81		42 - 115	12/10/16 09:29	12/14/16 06:48	1
2,4,6-Tribromophenol	26		25 - 130	12/10/16 09:29	12/14/16 06:48	1
Terphenyl-d14	97		25 - 150	12/10/16 09:29	12/14/16 06:48	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.37</b>	<b>J</b>	1.0	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Arsenic</b>	<b>6.3</b>		0.51	0.24	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Barium</b>	<b>47</b>		0.51	0.094	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Beryllium</b>	<b>0.48</b>		0.20	0.044	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Boron</b>	<b>4.3</b>		2.6	0.36	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Cadmium</b>	<b>0.32</b>		0.10	0.030	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Calcium</b>	<b>39000</b>		10	3.3	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Chromium</b>	<b>12</b>	<b>B</b>	0.51	0.088	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Cobalt</b>	<b>5.7</b>		0.26	0.058	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Copper</b>	<b>12</b>		0.51	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Iron</b>	<b>15000</b>		10	3.9	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Lead</b>	<b>9.7</b>		0.26	0.13	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Magnesium</b>	<b>21000</b>		5.1	2.1	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Manganese</b>	<b>350</b>		0.51	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Nickel</b>	<b>14</b>	<b>B</b>	0.51	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Potassium</b>	<b>1200</b>		26	4.2	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
Selenium	<0.51		0.51	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Sodium</b>	<b>1300</b>		51	6.8	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Thallium</b>	<b>0.71</b>		0.51	0.25	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Vanadium</b>	<b>21</b>		0.26	0.075	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1
<b>Zinc</b>	<b>34</b>		1.0	0.32	mg/Kg	☼	12/07/16 08:30	12/07/16 18:36	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.66</b>		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:28	1
Boron	<0.50		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:28	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

**Date Collected: 12/01/16 16:10**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 85.5**

**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 15:28	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:28	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:28	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 15:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 15:28	1
<b>Manganese</b>	<b>0.24</b>		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:28	1
<b>Nickel</b>	<b>0.011</b>	<b>J</b>	0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:28	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 15:28	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:28	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 15:28	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.3</b>		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 21:48	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 20:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 20:13	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		12/06/16 13:45	12/07/16 10:37	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.012</b>	<b>J</b>	0.018	0.0095	mg/Kg	☼	12/05/16 14:30	12/06/16 14:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.7</b>		0.2	0.2	SU			12/06/16 15:37	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: 1314V3-01-B31 (0-6)**

**Lab Sample ID: 500-120882-15**

**Date Collected: 12/01/16 16:20**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 19:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/02/16 16:10	12/06/16 19:31	1
Dibromofluoromethane	97		75 - 120	12/02/16 16:10	12/06/16 19:31	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/02/16 16:10	12/06/16 19:31	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 16:10	12/06/16 19:31	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B31 (0-6)**

**Lab Sample ID: 500-120882-15**

**Date Collected: 12/01/16 16:20**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
<b>Phenanthrene</b>	<b>0.011</b>	<b>J</b>	0.036	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
<b>Fluoranthene</b>	<b>0.020</b>	<b>J</b>	0.036	0.0066	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
<b>Pyrene</b>	<b>0.020</b>	<b>J</b>	0.036	0.0071	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
<b>Benzo[a]anthracene</b>	<b>0.0096</b>	<b>J</b>	0.036	0.0048	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B31 (0-6)**

**Lab Sample ID: 500-120882-15**

**Date Collected: 12/01/16 16:20**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.010</b>	<b>J</b>	0.036	0.0098	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
<b>Benzo[b]fluoranthene</b>	<b>0.021</b>	<b>J</b>	0.036	0.0077	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
<b>Benzo[a]pyrene</b>	<b>0.011</b>	<b>J</b>	0.036	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0093	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	81		40 - 130				12/10/16 09:29	12/14/16 07:13	1
Phenol-d5	89		36 - 123				12/10/16 09:29	12/14/16 07:13	1
Nitrobenzene-d5	79		33 - 124				12/10/16 09:29	12/14/16 07:13	1
2-Fluorobiphenyl	70		42 - 115				12/10/16 09:29	12/14/16 07:13	1
2,4,6-Tribromophenol	28		25 - 130				12/10/16 09:29	12/14/16 07:13	1
Terphenyl-d14	83		25 - 150				12/10/16 09:29	12/14/16 07:13	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.29</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Arsenic</b>	<b>6.1</b>		0.56	0.26	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Barium</b>	<b>38</b>		0.56	0.10	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Beryllium</b>	<b>0.46</b>		0.23	0.049	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Boron</b>	<b>3.9</b>		2.8	0.39	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Cadmium</b>	<b>0.25</b>		0.11	0.033	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Calcium</b>	<b>40000</b>		11	3.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.56	0.097	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Cobalt</b>	<b>6.6</b>		0.28	0.064	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Copper</b>	<b>11</b>		0.56	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Iron</b>	<b>14000</b>		11	4.3	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Lead</b>	<b>6.7</b>		0.28	0.14	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Magnesium</b>	<b>21000</b>		5.6	2.3	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Manganese</b>	<b>440</b>		0.56	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Nickel</b>	<b>14</b>	<b>B</b>	0.56	0.15	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Potassium</b>	<b>1300</b>		28	4.6	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Sodium</b>	<b>1000</b>		56	7.4	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Thallium</b>	<b>0.94</b>		0.56	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Vanadium</b>	<b>17</b>		0.28	0.082	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1
<b>Zinc</b>	<b>28</b>		1.1	0.36	mg/Kg	☼	12/07/16 08:30	12/07/16 18:59	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.60</b>		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:33	1
<b>Boron</b>	<b>0.053</b>	<b>J</b>	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:33	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B31 (0-6)**

**Lab Sample ID: 500-120882-15**

**Date Collected: 12/01/16 16:20**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0022</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
<b>Manganese</b>	<b>2.5</b>		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
<b>Nickel</b>	<b>0.028</b>		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:16	12/07/16 15:33	1
<b>Zinc</b>	<b>0.023</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/06/16 14:16	12/07/16 15:33	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L	-	12/06/16 14:13	12/07/16 21:54	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:16	12/07/16 20:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:16	12/07/16 20:16	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 10:39	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.038</b>		0.018	0.0095	mg/Kg	☼	12/05/16 14:30	12/06/16 14:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.5</b>		0.2	0.2	SU	-		12/06/16 15:41	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B20 (0-6)**

**Lab Sample ID: 500-120882-16**

**Date Collected: 12/01/16 16:45**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/02/16 16:10	12/06/16 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/02/16 16:10	12/06/16 19:55	1
Dibromofluoromethane	99		75 - 120	12/02/16 16:10	12/06/16 19:55	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/02/16 16:10	12/06/16 19:55	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 16:10	12/06/16 19:55	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B20 (0-6)**

**Lab Sample ID: 500-120882-16**

**Date Collected: 12/01/16 16:45**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
<b>Phenanthrene</b>	<b>0.0087</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
<b>Fluoranthene</b>	<b>0.020</b>	<b>J</b>	0.037	0.0070	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
<b>Pyrene</b>	<b>0.018</b>	<b>J</b>	0.037	0.0075	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
<b>Benzo[a]anthracene</b>	<b>0.0098</b>	<b>J</b>	0.037	0.0051	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B20 (0-6)**

**Lab Sample ID: 500-120882-16**

Date Collected: 12/01/16 16:45

Matrix: Solid

Date Received: 12/02/16 10:10

Percent Solids: 88.3

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.011</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
<b>Benzo[b]fluoranthene</b>	<b>0.022</b>	<b>J</b>	0.037	0.0081	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
<b>Benzo[a]pyrene</b>	<b>0.011</b>	<b>J</b>	0.037	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 09:29	12/14/16 07:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		40 - 130	12/10/16 09:29	12/14/16 07:39	1
Phenol-d5	99		36 - 123	12/10/16 09:29	12/14/16 07:39	1
Nitrobenzene-d5	91		33 - 124	12/10/16 09:29	12/14/16 07:39	1
2-Fluorobiphenyl	78		42 - 115	12/10/16 09:29	12/14/16 07:39	1
2,4,6-Tribromophenol	36		25 - 130	12/10/16 09:29	12/14/16 07:39	1
Terphenyl-d14	96		25 - 150	12/10/16 09:29	12/14/16 07:39	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.37</b>	<b>J</b>	0.90	0.19	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Arsenic</b>	<b>4.2</b>		0.45	0.21	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Barium</b>	<b>71</b>		0.45	0.082	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Beryllium</b>	<b>0.47</b>		0.18	0.039	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Boron</b>	<b>3.0</b>		2.2	0.31	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Cadmium</b>	<b>0.35</b>		0.090	0.026	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Calcium</b>	<b>22000</b>		9.0	2.9	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.45	0.077	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Cobalt</b>	<b>5.5</b>		0.22	0.051	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Copper</b>	<b>12</b>		0.45	0.097	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Iron</b>	<b>13000</b>		9.0	3.5	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Lead</b>	<b>22</b>		0.22	0.11	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Magnesium</b>	<b>11000</b>		4.5	1.8	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Manganese</b>	<b>410</b>		0.45	0.089	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Nickel</b>	<b>13</b>	<b>B</b>	0.45	0.12	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Potassium</b>	<b>1100</b>		22	3.7	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Selenium	<0.45		0.45	0.22	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
Silver	<0.22		0.22	0.052	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Sodium</b>	<b>170</b>		45	5.9	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Thallium</b>	<b>0.93</b>		0.45	0.22	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Vanadium</b>	<b>18</b>		0.22	0.065	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1
<b>Zinc</b>	<b>39</b>		0.90	0.28	mg/Kg	☼	12/07/16 08:30	12/07/16 19:05	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.67</b>		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 15:38	1
<b>Boron</b>	<b>0.072</b>	<b>J</b>	0.50	0.050	mg/L		12/06/16 14:16	12/07/16 15:38	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B20 (0-6)**

**Lab Sample ID: 500-120882-16**

**Date Collected: 12/01/16 16:45**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:16	12/07/16 15:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 15:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 15:38	1
<b>Manganese</b>	<b>0.17</b>		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
<b>Selenium</b>	<b>0.021 J</b>		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 15:38	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 15:38	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/16 14:16	12/07/16 15:38	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.44</b>		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 22:01	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:16	12/07/16 20:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 20:20	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:40	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015 J</b>		0.016	0.0086	mg/Kg	☼	12/05/16 14:30	12/06/16 14:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.7</b>		0.2	0.2	SU			12/06/16 15:45	1

# Definitions/Glossary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## 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)

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## GC/MS VOA

### Prep Batch: 363513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	5035	
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	5035	
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	5035	
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	5035	
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	5035	
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	5035	
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	5035	
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	5035	
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	5035	
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	5035	
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	5035	
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	5035	
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	5035	
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	5035	
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	5035	
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	5035	

### Analysis Batch: 363745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	8260B	363513
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	8260B	363513
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	8260B	363513
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	8260B	363513
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	8260B	363513
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	8260B	363513
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	8260B	363513
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	8260B	363513
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	8260B	363513
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	8260B	363513
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	8260B	363513
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	8260B	363513
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	8260B	363513
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	8260B	363513
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	8260B	363513
MB 500-363745/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-363745/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363745/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 363925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	8260B	363513
MB 500-363925/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-363925/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363925/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 364505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	3541	

TestAmerica Chicago



# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 364505 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	3541	
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	3541	
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	3541	
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	3541	
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	3541	
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	3541	
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	3541	
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	3541	
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	3541	
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	3541	
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	3541	
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	3541	
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	3541	
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	3541	
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	3541	
MB 500-364505/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-364505/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-120882-2 MS	1314V3-57-B02 (0-3)	Total/NA	Solid	3541	
500-120882-2 MSD	1314V3-57-B02 (0-3)	Total/NA	Solid	3541	

### Analysis Batch: 364728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-364505/1-A	Method Blank	Total/NA	Solid	8270D	364505
LCS 500-364505/2-A	Lab Control Sample	Total/NA	Solid	8270D	364505

### Analysis Batch: 364962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	8270D	364505
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	8270D	364505
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	8270D	364505
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	8270D	364505
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	8270D	364505
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	8270D	364505
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	8270D	364505
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	8270D	364505
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	8270D	364505
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	8270D	364505
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	8270D	364505
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	8270D	364505
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	8270D	364505
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	8270D	364505
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	8270D	364505
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	8270D	364505
500-120882-2 MS	1314V3-57-B02 (0-3)	Total/NA	Solid	8270D	364505
500-120882-2 MSD	1314V3-57-B02 (0-3)	Total/NA	Solid	8270D	364505

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Metals

### Prep Batch: 363620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	7471B	
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	7471B	
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	7471B	
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	7471B	
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	7471B	
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	7471B	
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	7471B	
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	7471B	
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	7471B	
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	7471B	
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	7471B	
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	7471B	
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	7471B	
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	7471B	
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	7471B	
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	7471B	
MB 500-363620/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-363620/13-A	Lab Control Sample	Total/NA	Solid	7471B	

### Leach Batch: 363721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	SPLP East	Solid	1312	
500-120882-2	1314V3-57-B02 (0-3)	SPLP East	Solid	1312	
500-120882-4	1314V3-56-B03 (0-3)	SPLP East	Solid	1312	
500-120882-5	1314V3-56-B02 (0-3)	SPLP East	Solid	1312	
500-120882-6	1314V3-56-B02 (0-3)D	SPLP East	Solid	1312	
500-120882-7	1314V3-56-B01 (0-3)	SPLP East	Solid	1312	
500-120882-8	1314V3-59-B01 (0-5)	SPLP East	Solid	1312	
500-120882-9	1314V3-59-B01 (5-10)	SPLP East	Solid	1312	
500-120882-12	1314V3-26-B01 (0-8)	SPLP East	Solid	1312	
500-120882-14	1314V3-01-B30 (0-6)	SPLP East	Solid	1312	
500-120882-15	1314V3-01-B31 (0-6)	SPLP East	Solid	1312	
500-120882-16	1314V3-01-B20 (0-6)	SPLP East	Solid	1312	
LB 500-363721/1-B	Method Blank	SPLP East	Solid	1312	
500-120882-16 MS	1314V3-01-B20 (0-6)	SPLP East	Solid	1312	
500-120882-16 DU	1314V3-01-B20 (0-6)	SPLP East	Solid	1312	

### Leach Batch: 363729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	TCLP	Solid	1311	
500-120882-2	1314V3-57-B02 (0-3)	TCLP	Solid	1311	
500-120882-3	1314V3-57-B01 (0-3)	TCLP	Solid	1311	
500-120882-4	1314V3-56-B03 (0-3)	TCLP	Solid	1311	
500-120882-5	1314V3-56-B02 (0-3)	TCLP	Solid	1311	
500-120882-6	1314V3-56-B02 (0-3)D	TCLP	Solid	1311	
500-120882-7	1314V3-56-B01 (0-3)	TCLP	Solid	1311	
500-120882-8	1314V3-59-B01 (0-5)	TCLP	Solid	1311	
500-120882-9	1314V3-59-B01 (5-10)	TCLP	Solid	1311	
500-120882-10	1314V3-32-B08 (0-3)	TCLP	Solid	1311	
500-120882-11	1314V3-32-B07 (0-3)	TCLP	Solid	1311	
500-120882-12	1314V3-26-B01 (0-8)	TCLP	Solid	1311	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Metals (Continued)

### Leach Batch: 363729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-13	1314V3-26-B02 (0-8)	TCLP	Solid	1311	
500-120882-14	1314V3-01-B30 (0-6)	TCLP	Solid	1311	
500-120882-15	1314V3-01-B31 (0-6)	TCLP	Solid	1311	
500-120882-16	1314V3-01-B20 (0-6)	TCLP	Solid	1311	
LB 500-363729/1-C	Method Blank	TCLP	Solid	1311	
LB 500-363729/1-D	Method Blank	TCLP	Solid	1311	
500-120882-1 MS	1314V3-57-B03 (0-5)	TCLP	Solid	1311	
500-120882-1 DU	1314V3-57-B03 (0-5)	TCLP	Solid	1311	

### Prep Batch: 363806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	TCLP	Solid	7470A	363729
500-120882-2	1314V3-57-B02 (0-3)	TCLP	Solid	7470A	363729
500-120882-3	1314V3-57-B01 (0-3)	TCLP	Solid	7470A	363729
500-120882-4	1314V3-56-B03 (0-3)	TCLP	Solid	7470A	363729
500-120882-5	1314V3-56-B02 (0-3)	TCLP	Solid	7470A	363729
500-120882-6	1314V3-56-B02 (0-3)D	TCLP	Solid	7470A	363729
500-120882-7	1314V3-56-B01 (0-3)	TCLP	Solid	7470A	363729
500-120882-8	1314V3-59-B01 (0-5)	TCLP	Solid	7470A	363729
500-120882-9	1314V3-59-B01 (5-10)	TCLP	Solid	7470A	363729
500-120882-10	1314V3-32-B08 (0-3)	TCLP	Solid	7470A	363729
500-120882-11	1314V3-32-B07 (0-3)	TCLP	Solid	7470A	363729
500-120882-12	1314V3-26-B01 (0-8)	TCLP	Solid	7470A	363729
500-120882-13	1314V3-26-B02 (0-8)	TCLP	Solid	7470A	363729
500-120882-14	1314V3-01-B30 (0-6)	TCLP	Solid	7470A	363729
500-120882-15	1314V3-01-B31 (0-6)	TCLP	Solid	7470A	363729
500-120882-16	1314V3-01-B20 (0-6)	TCLP	Solid	7470A	363729
LB 500-363729/1-C	Method Blank	TCLP	Solid	7470A	363729
MB 500-363806/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-363806/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-120882-1 MS	1314V3-57-B03 (0-5)	TCLP	Solid	7470A	363729
500-120882-1 DU	1314V3-57-B03 (0-5)	TCLP	Solid	7470A	363729

### Prep Batch: 363820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	SPLP East	Solid	3010A	363721
500-120882-2	1314V3-57-B02 (0-3)	SPLP East	Solid	3010A	363721
500-120882-4	1314V3-56-B03 (0-3)	SPLP East	Solid	3010A	363721
500-120882-5	1314V3-56-B02 (0-3)	SPLP East	Solid	3010A	363721
500-120882-6	1314V3-56-B02 (0-3)D	SPLP East	Solid	3010A	363721
500-120882-7	1314V3-56-B01 (0-3)	SPLP East	Solid	3010A	363721
500-120882-8	1314V3-59-B01 (0-5)	SPLP East	Solid	3010A	363721
500-120882-9	1314V3-59-B01 (5-10)	SPLP East	Solid	3010A	363721
500-120882-12	1314V3-26-B01 (0-8)	SPLP East	Solid	3010A	363721
500-120882-14	1314V3-01-B30 (0-6)	SPLP East	Solid	3010A	363721
500-120882-15	1314V3-01-B31 (0-6)	SPLP East	Solid	3010A	363721
500-120882-16	1314V3-01-B20 (0-6)	SPLP East	Solid	3010A	363721
LB 500-363721/1-B	Method Blank	SPLP East	Solid	3010A	363721
LCS 500-363820/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-120882-16 MS	1314V3-01-B20 (0-6)	SPLP East	Solid	3010A	363721
500-120882-16 DU	1314V3-01-B20 (0-6)	SPLP East	Solid	3010A	363721

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Prep Batch: 363822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	TCLP	Solid	3010A	363729
500-120882-2	1314V3-57-B02 (0-3)	TCLP	Solid	3010A	363729
500-120882-3	1314V3-57-B01 (0-3)	TCLP	Solid	3010A	363729
500-120882-4	1314V3-56-B03 (0-3)	TCLP	Solid	3010A	363729
500-120882-5	1314V3-56-B02 (0-3)	TCLP	Solid	3010A	363729
500-120882-6	1314V3-56-B02 (0-3)D	TCLP	Solid	3010A	363729
500-120882-7	1314V3-56-B01 (0-3)	TCLP	Solid	3010A	363729
500-120882-8	1314V3-59-B01 (0-5)	TCLP	Solid	3010A	363729
500-120882-9	1314V3-59-B01 (5-10)	TCLP	Solid	3010A	363729
500-120882-10	1314V3-32-B08 (0-3)	TCLP	Solid	3010A	363729
500-120882-11	1314V3-32-B07 (0-3)	TCLP	Solid	3010A	363729
500-120882-12	1314V3-26-B01 (0-8)	TCLP	Solid	3010A	363729
500-120882-13	1314V3-26-B02 (0-8)	TCLP	Solid	3010A	363729
500-120882-14	1314V3-01-B30 (0-6)	TCLP	Solid	3010A	363729
500-120882-15	1314V3-01-B31 (0-6)	TCLP	Solid	3010A	363729
500-120882-16	1314V3-01-B20 (0-6)	TCLP	Solid	3010A	363729
LB 500-363729/1-D	Method Blank	TCLP	Solid	3010A	363729
LCS 500-363822/2-A	Lab Control Sample	Total/NA	Solid	3010A	

## Analysis Batch: 363848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	7471B	363620
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	7471B	363620
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	7471B	363620
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	7471B	363620
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	7471B	363620
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	7471B	363620
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	7471B	363620
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	7471B	363620
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	7471B	363620
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	7471B	363620
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	7471B	363620
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	7471B	363620
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	7471B	363620
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	7471B	363620
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	7471B	363620
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	7471B	363620
MB 500-363620/12-A	Method Blank	Total/NA	Solid	7471B	363620
LCS 500-363620/13-A	Lab Control Sample	Total/NA	Solid	7471B	363620

## Prep Batch: 363940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	3050B	
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	3050B	
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	3050B	
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	3050B	
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	3050B	
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	3050B	
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	3050B	
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	3050B	
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	3050B	
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	3050B	
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	3050B	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Metals (Continued)

### Prep Batch: 363940 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	3050B	
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	3050B	
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	3050B	
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	3050B	
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	3050B	
MB 500-363940/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-363940/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-120882-1 MS	1314V3-57-B03 (0-5)	Total/NA	Solid	3050B	
500-120882-1 MSD	1314V3-57-B03 (0-5)	Total/NA	Solid	3050B	
500-120882-1 DU	1314V3-57-B03 (0-5)	Total/NA	Solid	3050B	

### Analysis Batch: 363991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	TCLP	Solid	7470A	363806
500-120882-2	1314V3-57-B02 (0-3)	TCLP	Solid	7470A	363806
500-120882-3	1314V3-57-B01 (0-3)	TCLP	Solid	7470A	363806
500-120882-4	1314V3-56-B03 (0-3)	TCLP	Solid	7470A	363806
500-120882-5	1314V3-56-B02 (0-3)	TCLP	Solid	7470A	363806
500-120882-6	1314V3-56-B02 (0-3)D	TCLP	Solid	7470A	363806
500-120882-7	1314V3-56-B01 (0-3)	TCLP	Solid	7470A	363806
500-120882-8	1314V3-59-B01 (0-5)	TCLP	Solid	7470A	363806
500-120882-9	1314V3-59-B01 (5-10)	TCLP	Solid	7470A	363806
500-120882-10	1314V3-32-B08 (0-3)	TCLP	Solid	7470A	363806
500-120882-11	1314V3-32-B07 (0-3)	TCLP	Solid	7470A	363806
500-120882-12	1314V3-26-B01 (0-8)	TCLP	Solid	7470A	363806
500-120882-13	1314V3-26-B02 (0-8)	TCLP	Solid	7470A	363806
500-120882-14	1314V3-01-B30 (0-6)	TCLP	Solid	7470A	363806
500-120882-15	1314V3-01-B31 (0-6)	TCLP	Solid	7470A	363806
500-120882-16	1314V3-01-B20 (0-6)	TCLP	Solid	7470A	363806
LB 500-363729/1-C	Method Blank	TCLP	Solid	7470A	363806
MB 500-363806/12-A	Method Blank	Total/NA	Solid	7470A	363806
LCS 500-363806/13-A	Lab Control Sample	Total/NA	Solid	7470A	363806
500-120882-1 MS	1314V3-57-B03 (0-5)	TCLP	Solid	7470A	363806
500-120882-1 DU	1314V3-57-B03 (0-5)	TCLP	Solid	7470A	363806

### Analysis Batch: 364126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	TCLP	Solid	6010B	363822
500-120882-2	1314V3-57-B02 (0-3)	TCLP	Solid	6010B	363822
500-120882-3	1314V3-57-B01 (0-3)	TCLP	Solid	6010B	363822
500-120882-4	1314V3-56-B03 (0-3)	TCLP	Solid	6010B	363822
500-120882-5	1314V3-56-B02 (0-3)	TCLP	Solid	6010B	363822
500-120882-6	1314V3-56-B02 (0-3)D	TCLP	Solid	6010B	363822
500-120882-7	1314V3-56-B01 (0-3)	TCLP	Solid	6010B	363822
500-120882-8	1314V3-59-B01 (0-5)	TCLP	Solid	6010B	363822
500-120882-9	1314V3-59-B01 (5-10)	TCLP	Solid	6010B	363822
500-120882-10	1314V3-32-B08 (0-3)	TCLP	Solid	6010B	363822
500-120882-11	1314V3-32-B07 (0-3)	TCLP	Solid	6010B	363822
500-120882-12	1314V3-26-B01 (0-8)	TCLP	Solid	6010B	363822
500-120882-13	1314V3-26-B02 (0-8)	TCLP	Solid	6010B	363822
500-120882-14	1314V3-01-B30 (0-6)	TCLP	Solid	6010B	363822

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Metals (Continued)

### Analysis Batch: 364126 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-15	1314V3-01-B31 (0-6)	TCLP	Solid	6010B	363822
500-120882-16	1314V3-01-B20 (0-6)	TCLP	Solid	6010B	363822
LB 500-363729/1-D	Method Blank	TCLP	Solid	6010B	363822
LCS 500-363822/2-A	Lab Control Sample	Total/NA	Solid	6010B	363822

### Analysis Batch: 364150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	SPLP East	Solid	6010B	363820
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	6010B	363940
500-120882-2	1314V3-57-B02 (0-3)	SPLP East	Solid	6010B	363820
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	6010B	363940
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	6010B	363940
500-120882-4	1314V3-56-B03 (0-3)	SPLP East	Solid	6010B	363820
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	6010B	363940
500-120882-5	1314V3-56-B02 (0-3)	SPLP East	Solid	6010B	363820
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	6010B	363940
500-120882-6	1314V3-56-B02 (0-3)D	SPLP East	Solid	6010B	363820
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	6010B	363940
500-120882-7	1314V3-56-B01 (0-3)	SPLP East	Solid	6010B	363820
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	6010B	363940
500-120882-8	1314V3-59-B01 (0-5)	SPLP East	Solid	6010B	363820
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	6010B	363940
500-120882-9	1314V3-59-B01 (5-10)	SPLP East	Solid	6010B	363820
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	6010B	363940
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	6010B	363940
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	6010B	363940
500-120882-12	1314V3-26-B01 (0-8)	SPLP East	Solid	6010B	363820
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	6010B	363940
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	6010B	363940
500-120882-14	1314V3-01-B30 (0-6)	SPLP East	Solid	6010B	363820
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	6010B	363940
500-120882-15	1314V3-01-B31 (0-6)	SPLP East	Solid	6010B	363820
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	6010B	363940
500-120882-16	1314V3-01-B20 (0-6)	SPLP East	Solid	6010B	363820
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	6010B	363940
LB 500-363721/1-B	Method Blank	SPLP East	Solid	6010B	363820
MB 500-363940/1-A	Method Blank	Total/NA	Solid	6010B	363940
LCS 500-363820/2-A	Lab Control Sample	Total/NA	Solid	6010B	363820
LCS 500-363940/2-A	Lab Control Sample	Total/NA	Solid	6010B	363940
500-120882-1 MS	1314V3-57-B03 (0-5)	Total/NA	Solid	6010B	363940
500-120882-1 MSD	1314V3-57-B03 (0-5)	Total/NA	Solid	6010B	363940
500-120882-16 MS	1314V3-01-B20 (0-6)	SPLP East	Solid	6010B	363820
500-120882-1 DU	1314V3-57-B03 (0-5)	Total/NA	Solid	6010B	363940
500-120882-16 DU	1314V3-01-B20 (0-6)	SPLP East	Solid	6010B	363820

### Analysis Batch: 364154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	TCLP	Solid	6020A	363822
500-120882-2	1314V3-57-B02 (0-3)	TCLP	Solid	6020A	363822
500-120882-3	1314V3-57-B01 (0-3)	TCLP	Solid	6020A	363822
500-120882-4	1314V3-56-B03 (0-3)	TCLP	Solid	6020A	363822

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Metals (Continued)

### Analysis Batch: 364154 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-5	1314V3-56-B02 (0-3)	TCLP	Solid	6020A	363822
500-120882-6	1314V3-56-B02 (0-3)D	TCLP	Solid	6020A	363822
500-120882-7	1314V3-56-B01 (0-3)	TCLP	Solid	6020A	363822
500-120882-8	1314V3-59-B01 (0-5)	TCLP	Solid	6020A	363822
500-120882-9	1314V3-59-B01 (5-10)	TCLP	Solid	6020A	363822
500-120882-10	1314V3-32-B08 (0-3)	TCLP	Solid	6020A	363822
500-120882-11	1314V3-32-B07 (0-3)	TCLP	Solid	6020A	363822
500-120882-12	1314V3-26-B01 (0-8)	TCLP	Solid	6020A	363822
500-120882-13	1314V3-26-B02 (0-8)	TCLP	Solid	6020A	363822
500-120882-14	1314V3-01-B30 (0-6)	TCLP	Solid	6020A	363822
500-120882-15	1314V3-01-B31 (0-6)	TCLP	Solid	6020A	363822
500-120882-16	1314V3-01-B20 (0-6)	TCLP	Solid	6020A	363822
LB 500-363729/1-D	Method Blank	TCLP	Solid	6020A	363822
LCS 500-363822/2-A	Lab Control Sample	Total/NA	Solid	6020A	363822

## General Chemistry

### Analysis Batch: 363399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	Moisture	
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	Moisture	
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	Moisture	
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	Moisture	
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	Moisture	
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	Moisture	
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	Moisture	
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	Moisture	
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	Moisture	
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	Moisture	
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	Moisture	
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	Moisture	
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	Moisture	
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	Moisture	
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	Moisture	
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	Moisture	
500-120882-1 DU	1314V3-57-B03 (0-5)	Total/NA	Solid	Moisture	

### Analysis Batch: 363978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-1	1314V3-57-B03 (0-5)	Total/NA	Solid	9045D	
500-120882-2	1314V3-57-B02 (0-3)	Total/NA	Solid	9045D	
500-120882-3	1314V3-57-B01 (0-3)	Total/NA	Solid	9045D	
500-120882-4	1314V3-56-B03 (0-3)	Total/NA	Solid	9045D	
500-120882-5	1314V3-56-B02 (0-3)	Total/NA	Solid	9045D	
500-120882-6	1314V3-56-B02 (0-3)D	Total/NA	Solid	9045D	
500-120882-7	1314V3-56-B01 (0-3)	Total/NA	Solid	9045D	
500-120882-8	1314V3-59-B01 (0-5)	Total/NA	Solid	9045D	
500-120882-9	1314V3-59-B01 (5-10)	Total/NA	Solid	9045D	
500-120882-10	1314V3-32-B08 (0-3)	Total/NA	Solid	9045D	
500-120882-11	1314V3-32-B07 (0-3)	Total/NA	Solid	9045D	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## General Chemistry (Continued)

### Analysis Batch: 363978 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120882-12	1314V3-26-B01 (0-8)	Total/NA	Solid	9045D	
500-120882-13	1314V3-26-B02 (0-8)	Total/NA	Solid	9045D	
500-120882-14	1314V3-01-B30 (0-6)	Total/NA	Solid	9045D	
500-120882-15	1314V3-01-B31 (0-6)	Total/NA	Solid	9045D	
500-120882-16	1314V3-01-B20 (0-6)	Total/NA	Solid	9045D	
500-120882-2 DU	1314V3-57-B02 (0-3)	Total/NA	Solid	9045D	



# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (70-120)	DBFM (75-120)	12DCE (69-134)	TOL (75-123)
500-120882-1	1314V3-57-B03 (0-5)	108	100	105	100
500-120882-2	1314V3-57-B02 (0-3)	105	96	103	102
500-120882-3	1314V3-57-B01 (0-3)	108	100	105	102
500-120882-4	1314V3-56-B03 (0-3)	105	99	104	101
500-120882-5	1314V3-56-B02 (0-3)	109	98	108	101
500-120882-6	1314V3-56-B02 (0-3)D	108	100	108	102
500-120882-7	1314V3-56-B01 (0-3)	104	102	108	99
500-120882-8	1314V3-59-B01 (0-5)	107	98	105	103
500-120882-9	1314V3-59-B01 (5-10)	106	97	103	99
500-120882-10	1314V3-32-B08 (0-3)	106	101	103	102
500-120882-11	1314V3-32-B07 (0-3)	109	99	107	104
500-120882-12	1314V3-26-B01 (0-8)	108	99	102	103
500-120882-13	1314V3-26-B02 (0-8)	107	101	106	104
500-120882-14	1314V3-01-B30 (0-6)	107	98	112	100
500-120882-15	1314V3-01-B31 (0-6)	110	97	105	103
500-120882-16	1314V3-01-B20 (0-6)	105	99	104	102
LCS 500-363745/5	Lab Control Sample	101	96	97	103
LCS 500-363925/4	Lab Control Sample	102	93	95	105
LCSD 500-363745/6	Lab Control Sample Dup	102	94	96	103
LCSD 500-363925/5	Lab Control Sample Dup	100	96	100	103
MB 500-363745/7	Method Blank	106	95	93	103
MB 500-363925/7	Method Blank	108	94	100	103

### 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

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)
500-120882-1	1314V3-57-B03 (0-5)	93	103	87	82	60	96
500-120882-2	1314V3-57-B02 (0-3)	114	118	92	91	67	108
500-120882-2 MS	1314V3-57-B02 (0-3)	107	115	103	88	84	106
500-120882-2 MSD	1314V3-57-B02 (0-3)	103	113	102	89	75	95
500-120882-3	1314V3-57-B01 (0-3)	86	81	76	72	31	88
500-120882-4	1314V3-56-B03 (0-3)	101	99	94	80	64	105
500-120882-5	1314V3-56-B02 (0-3)	91	86	78	75	55	88
500-120882-6	1314V3-56-B02 (0-3)D	107	104	96	82	40	100
500-120882-7	1314V3-56-B01 (0-3)	111	115	101	89	70	104
500-120882-8	1314V3-59-B01 (0-5)	108	99	103	92	67	103
500-120882-9	1314V3-59-B01 (5-10)	84	82	79	67	55	84
500-120882-10	1314V3-32-B08 (0-3)	108	114	103	94	68	108
500-120882-11	1314V3-32-B07 (0-3)	87	92	84	78	41	90
500-120882-12	1314V3-26-B01 (0-8)	105	116	98	84	78	110

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# Surrogate Summary

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

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)
500-120882-13	1314V3-26-B02 (0-8)	111	119	108	95	72	113
500-120882-14	1314V3-01-B30 (0-6)	96	103	92	81	26	97
500-120882-15	1314V3-01-B31 (0-6)	81	89	79	70	28	83
500-120882-16	1314V3-01-B20 (0-6)	94	99	91	78	36	96
LCS 500-364505/2-A	Lab Control Sample	100	99	94	86	102	97
MB 500-364505/1-A	Method Blank	97	98	93	93	71	100

### 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: 500-120882-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-363745/7**

**Matrix: Solid**

**Analysis Batch: 363745**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/16 11:10	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 11:10	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/16 11:10	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 11:10	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/16 11:10	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/16 11:10	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/16 11:10	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 11:10	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/16 11:10	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 11:10	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 11:10	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 11:10	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/16 11:10	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 11:10	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/16 11:10	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 11:10	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 11:10	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 11:10	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/16 11:10	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 11:10	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/16 11:10	1
2-Hexanone	0.00505		0.0050	0.0016	mg/Kg			12/06/16 11:10	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 11:10	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 11:10	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/16 11:10	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 11:10	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/16 11:10	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 11:10	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 11:10	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 11:10	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 11:10	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/16 11:10	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/16 11:10	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 11:10	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/16 11:10	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 11:10	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/16 11:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120		12/06/16 11:10	1
Dibromofluoromethane	95		75 - 120		12/06/16 11:10	1
1,2-Dichloroethane-d4 (Surr)	93		69 - 134		12/06/16 11:10	1
Toluene-d8 (Surr)	103		75 - 123		12/06/16 11:10	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363745/5**

**Matrix: Solid**

**Analysis Batch: 363745**

**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	0.0521		mg/Kg		104	40 - 148
Benzene	0.0500	0.0474		mg/Kg		95	70 - 120
Bromodichloromethane	0.0500	0.0510		mg/Kg		102	67 - 120
Bromoform	0.0500	0.0538		mg/Kg		108	50 - 129
Bromomethane	0.0500	0.0432		mg/Kg		86	50 - 134
2-Butanone (MEK)	0.0500	0.0501		mg/Kg		100	47 - 138
Carbon disulfide	0.0500	0.0466		mg/Kg		93	67 - 133
Carbon tetrachloride	0.0500	0.0473		mg/Kg		95	65 - 123
Chlorobenzene	0.0500	0.0496		mg/Kg		99	70 - 120
Chloroethane	0.0500	0.0443		mg/Kg		89	40 - 150
Chloroform	0.0500	0.0494		mg/Kg		99	70 - 120
Chloromethane	0.0500	0.0458		mg/Kg		92	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0479		mg/Kg		96	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0518		mg/Kg		104	70 - 120
Dibromochloromethane	0.0500	0.0539		mg/Kg		108	68 - 120
1,1-Dichloroethane	0.0500	0.0480		mg/Kg		96	70 - 125
1,2-Dichloroethane	0.0500	0.0508		mg/Kg		102	65 - 126
1,1-Dichloroethene	0.0500	0.0479		mg/Kg		96	70 - 122
1,2-Dichloropropane	0.0500	0.0477		mg/Kg		95	70 - 126
Ethylbenzene	0.0500	0.0499		mg/Kg		100	70 - 120
2-Hexanone	0.0500	0.0518		mg/Kg		104	51 - 139
Methylene Chloride	0.0500	0.0462		mg/Kg		92	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0518		mg/Kg		104	51 - 141
Methyl tert-butyl ether	0.0500	0.0504		mg/Kg		101	70 - 121
Styrene	0.0500	0.0512		mg/Kg		102	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0581		mg/Kg		116	70 - 125
Tetrachloroethene	0.0500	0.0501		mg/Kg		100	70 - 122
Toluene	0.0500	0.0498		mg/Kg		100	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0482		mg/Kg		96	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0528		mg/Kg		106	70 - 121
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 120
1,1,2-Trichloroethane	0.0500	0.0539		mg/Kg		108	70 - 120
Trichloroethene	0.0500	0.0484		mg/Kg		97	70 - 124
Vinyl acetate	0.0500	0.0368		mg/Kg		74	40 - 150
Vinyl chloride	0.0500	0.0486		mg/Kg		97	64 - 125
Xylenes, Total	0.100	0.102		mg/Kg		102	70 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane	96		75 - 120
1,2-Dichloroethane-d4 (Surr)	97		69 - 134
Toluene-d8 (Surr)	103		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-363745/6

Matrix: Solid

Analysis Batch: 363745

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	0.0471		mg/Kg		94	40 - 148	10	30
Benzene	0.0500	0.0478		mg/Kg		96	70 - 120	1	30
Bromodichloromethane	0.0500	0.0493		mg/Kg		99	67 - 120	3	30
Bromoform	0.0500	0.0525		mg/Kg		105	50 - 129	2	30
Bromomethane	0.0500	0.0431		mg/Kg		86	50 - 134	0	30
2-Butanone (MEK)	0.0500	0.0464		mg/Kg		93	47 - 138	8	30
Carbon disulfide	0.0500	0.0473		mg/Kg		95	67 - 133	1	30
Carbon tetrachloride	0.0500	0.0475		mg/Kg		95	65 - 123	0	30
Chlorobenzene	0.0500	0.0491		mg/Kg		98	70 - 120	1	30
Chloroethane	0.0500	0.0514		mg/Kg		103	40 - 150	15	30
Chloroform	0.0500	0.0485		mg/Kg		97	70 - 120	2	30
Chloromethane	0.0500	0.0442		mg/Kg		88	63 - 135	4	30
cis-1,2-Dichloroethene	0.0500	0.0478		mg/Kg		96	70 - 120	0	30
cis-1,3-Dichloropropene	0.0500	0.0515		mg/Kg		103	70 - 120	1	30
Dibromochloromethane	0.0500	0.0519		mg/Kg		104	68 - 120	4	30
1,1-Dichloroethane	0.0500	0.0480		mg/Kg		96	70 - 125	0	30
1,2-Dichloroethane	0.0500	0.0490		mg/Kg		98	65 - 126	4	30
1,1-Dichloroethene	0.0500	0.0484		mg/Kg		97	70 - 122	1	30
1,2-Dichloropropane	0.0500	0.0469		mg/Kg		94	70 - 126	2	30
Ethylbenzene	0.0500	0.0502		mg/Kg		100	70 - 120	0	30
2-Hexanone	0.0500	0.0500		mg/Kg		100	51 - 139	3	30
Methylene Chloride	0.0500	0.0453		mg/Kg		91	70 - 121	2	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0498		mg/Kg		100	51 - 141	4	30
Methyl tert-butyl ether	0.0500	0.0486		mg/Kg		97	70 - 121	4	30
Styrene	0.0500	0.0506		mg/Kg		101	70 - 121	1	30
1,1,1,2-Tetrachloroethane	0.0500	0.0562		mg/Kg		112	70 - 125	3	30
Tetrachloroethene	0.0500	0.0499		mg/Kg		100	70 - 122	0	30
Toluene	0.0500	0.0504		mg/Kg		101	70 - 121	1	30
trans-1,2-Dichloroethene	0.0500	0.0471		mg/Kg		94	70 - 120	2	30
trans-1,3-Dichloropropene	0.0500	0.0524		mg/Kg		105	70 - 121	1	30
1,1,1-Trichloroethane	0.0500	0.0474		mg/Kg		95	70 - 120	0	30
1,1,2-Trichloroethane	0.0500	0.0519		mg/Kg		104	70 - 120	4	30
Trichloroethene	0.0500	0.0484		mg/Kg		97	70 - 124	0	30
Vinyl acetate	0.0500	0.0328		mg/Kg		66	40 - 150	12	30
Vinyl chloride	0.0500	0.0463		mg/Kg		93	64 - 125	5	30
Xylenes, Total	0.100	0.103		mg/Kg		103	70 - 123	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	102		70 - 120
Dibromofluoromethane	94		75 - 120
1,2-Dichloroethane-d4 (Surr)	96		69 - 134
Toluene-d8 (Surr)	103		75 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-363925/7**

**Matrix: Solid**

**Analysis Batch: 363925**

**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			12/07/16 11:34	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/07/16 11:34	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/07/16 11:34	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/07/16 11:34	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/07/16 11:34	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/07/16 11:34	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/07/16 11:34	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/07/16 11:34	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/07/16 11:34	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/07/16 11:34	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 11:34	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/07/16 11:34	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/07/16 11:34	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/07/16 11:34	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/07/16 11:34	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 11:34	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/07/16 11:34	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 11:34	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/07/16 11:34	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/07/16 11:34	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/07/16 11:34	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/07/16 11:34	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/07/16 11:34	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/07/16 11:34	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/07/16 11:34	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/07/16 11:34	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/07/16 11:34	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/07/16 11:34	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/07/16 11:34	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/07/16 11:34	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/07/16 11:34	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/07/16 11:34	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/07/16 11:34	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/07/16 11:34	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/07/16 11:34	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/07/16 11:34	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/07/16 11:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120		12/07/16 11:34	1
Dibromofluoromethane	94		75 - 120		12/07/16 11:34	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134		12/07/16 11:34	1
Toluene-d8 (Surr)	103		75 - 123		12/07/16 11:34	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363925/4**

**Matrix: Solid**

**Analysis Batch: 363925**

**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	0.0443		mg/Kg		89	40 - 148
Benzene	0.0500	0.0469		mg/Kg		94	70 - 120
Bromodichloromethane	0.0500	0.0482		mg/Kg		96	67 - 120
Bromoform	0.0500	0.0470		mg/Kg		94	50 - 129
Bromomethane	0.0500	0.0434		mg/Kg		87	50 - 134
2-Butanone (MEK)	0.0500	0.0478		mg/Kg		96	47 - 138
Carbon disulfide	0.0500	0.0498		mg/Kg		100	67 - 133
Carbon tetrachloride	0.0500	0.0468		mg/Kg		94	65 - 123
Chlorobenzene	0.0500	0.0486		mg/Kg		97	70 - 120
Chloroethane	0.0500	0.0608		mg/Kg		122	40 - 150
Chloroform	0.0500	0.0479		mg/Kg		96	70 - 120
Chloromethane	0.0500	0.0435		mg/Kg		87	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0471		mg/Kg		94	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0497		mg/Kg		99	70 - 120
Dibromochloromethane	0.0500	0.0490		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0477		mg/Kg		95	70 - 125
1,2-Dichloroethane	0.0500	0.0490		mg/Kg		98	65 - 126
1,1-Dichloroethene	0.0500	0.0476		mg/Kg		95	70 - 122
1,2-Dichloropropane	0.0500	0.0463		mg/Kg		93	70 - 126
Ethylbenzene	0.0500	0.0491		mg/Kg		98	70 - 120
2-Hexanone	0.0500	0.0481		mg/Kg		96	51 - 139
Methylene Chloride	0.0500	0.0482		mg/Kg		96	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0487		mg/Kg		97	51 - 141
Methyl tert-butyl ether	0.0500	0.0456		mg/Kg		91	70 - 121
Styrene	0.0500	0.0487		mg/Kg		97	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0532		mg/Kg		106	70 - 125
Tetrachloroethene	0.0500	0.0495		mg/Kg		99	70 - 122
Toluene	0.0500	0.0496		mg/Kg		99	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0475		mg/Kg		95	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0497		mg/Kg		99	70 - 121
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 120
1,1,2-Trichloroethane	0.0500	0.0498		mg/Kg		100	70 - 120
Trichloroethene	0.0500	0.0467		mg/Kg		93	70 - 124
Vinyl acetate	0.0500	0.0474		mg/Kg		95	40 - 150
Vinyl chloride	0.0500	0.0455		mg/Kg		91	64 - 125
Xylenes, Total	0.100	0.100		mg/Kg		100	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 120
Dibromofluoromethane	93		75 - 120
1,2-Dichloroethane-d4 (Surr)	95		69 - 134
Toluene-d8 (Surr)	105		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-363925/5**

**Matrix: Solid**

**Analysis Batch: 363925**

**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	0.0473		mg/Kg		95	40 - 148	7	30
Benzene	0.0500	0.0480		mg/Kg		96	70 - 120	2	30
Bromodichloromethane	0.0500	0.0485		mg/Kg		97	67 - 120	1	30
Bromoform	0.0500	0.0475		mg/Kg		95	50 - 129	1	30
Bromomethane	0.0500	0.0419		mg/Kg		84	50 - 134	3	30
2-Butanone (MEK)	0.0500	0.0498		mg/Kg		100	47 - 138	4	30
Carbon disulfide	0.0500	0.0502		mg/Kg		100	67 - 133	1	30
Carbon tetrachloride	0.0500	0.0471		mg/Kg		94	65 - 123	1	30
Chlorobenzene	0.0500	0.0482		mg/Kg		96	70 - 120	1	30
Chloroethane	0.0500	0.0516		mg/Kg		103	40 - 150	16	30
Chloroform	0.0500	0.0489		mg/Kg		98	70 - 120	2	30
Chloromethane	0.0500	0.0407		mg/Kg		81	63 - 135	7	30
cis-1,2-Dichloroethene	0.0500	0.0486		mg/Kg		97	70 - 120	3	30
cis-1,3-Dichloropropene	0.0500	0.0489		mg/Kg		98	70 - 120	2	30
Dibromochloromethane	0.0500	0.0495		mg/Kg		99	68 - 120	1	30
1,1-Dichloroethane	0.0500	0.0489		mg/Kg		98	70 - 125	3	30
1,2-Dichloroethane	0.0500	0.0509		mg/Kg		102	65 - 126	4	30
1,1-Dichloroethene	0.0500	0.0493		mg/Kg		99	70 - 122	3	30
1,2-Dichloropropane	0.0500	0.0467		mg/Kg		93	70 - 126	1	30
Ethylbenzene	0.0500	0.0476		mg/Kg		95	70 - 120	3	30
2-Hexanone	0.0500	0.0522		mg/Kg		104	51 - 139	8	30
Methylene Chloride	0.0500	0.0500		mg/Kg		100	70 - 121	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0509		mg/Kg		102	51 - 141	4	30
Methyl tert-butyl ether	0.0500	0.0475		mg/Kg		95	70 - 121	4	30
Styrene	0.0500	0.0487		mg/Kg		97	70 - 121	0	30
1,1,1,2-Tetrachloroethane	0.0500	0.0532		mg/Kg		106	70 - 125	0	30
Tetrachloroethene	0.0500	0.0487		mg/Kg		97	70 - 122	1	30
Toluene	0.0500	0.0492		mg/Kg		98	70 - 121	1	30
trans-1,2-Dichloroethene	0.0500	0.0486		mg/Kg		97	70 - 120	2	30
trans-1,3-Dichloropropene	0.0500	0.0504		mg/Kg		101	70 - 121	1	30
1,1,1-Trichloroethane	0.0500	0.0478		mg/Kg		96	70 - 120	1	30
1,1,2-Trichloroethane	0.0500	0.0504		mg/Kg		101	70 - 120	1	30
Trichloroethene	0.0500	0.0483		mg/Kg		97	70 - 124	3	30
Vinyl acetate	0.0500	0.0512		mg/Kg		102	40 - 150	8	30
Vinyl chloride	0.0500	0.0443		mg/Kg		89	64 - 125	3	30
Xylenes, Total	0.100	0.100		mg/Kg		100	70 - 123	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	100		70 - 120
Dibromofluoromethane	96		75 - 120
1,2-Dichloroethane-d4 (Surr)	100		69 - 134
Toluene-d8 (Surr)	103		75 - 123

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-364505/1-A**

**Matrix: Solid**

**Analysis Batch: 364728**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 364505**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/10/16 09:29	12/12/16 21:22	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364505/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364728**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364505**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/10/16 09:29	12/12/16 21:22	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/10/16 09:29	12/12/16 21:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/10/16 09:29	12/12/16 21:22	1
Phenol-d5	98		36 - 123	12/10/16 09:29	12/12/16 21:22	1
Nitrobenzene-d5	93		33 - 124	12/10/16 09:29	12/12/16 21:22	1
2-Fluorobiphenyl	93		42 - 115	12/10/16 09:29	12/12/16 21:22	1
2,4,6-Tribromophenol	71		25 - 130	12/10/16 09:29	12/12/16 21:22	1
Terphenyl-d14	100		25 - 150	12/10/16 09:29	12/12/16 21:22	1

**Lab Sample ID: LCS 500-364505/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364728**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364505**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.25		mg/Kg		93	55 - 118
Bis(2-chloroethyl)ether	1.33	1.15		mg/Kg		86	53 - 116
1,3-Dichlorobenzene	1.33	1.15		mg/Kg		86	56 - 110
1,4-Dichlorobenzene	1.33	1.16		mg/Kg		87	57 - 110
1,2-Dichlorobenzene	1.33	1.20		mg/Kg		90	56 - 110
2-Methylphenol	1.33	1.16		mg/Kg		87	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.13		mg/Kg		84	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.22		mg/Kg		91	56 - 119
Hexachloroethane	1.33	1.18		mg/Kg		88	54 - 111
2-Chlorophenol	1.33	1.24		mg/Kg		93	57 - 117
Nitrobenzene	1.33	1.17		mg/Kg		88	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.21		mg/Kg		90	59 - 116
1,2,4-Trichlorobenzene	1.33	1.22		mg/Kg		92	60 - 116
Isophorone	1.33	1.14		mg/Kg		85	54 - 120
2,4-Dimethylphenol	1.33	1.20		mg/Kg		90	50 - 120
Hexachlorobutadiene	1.33	1.24		mg/Kg		93	56 - 120
Naphthalene	1.33	1.18		mg/Kg		89	58 - 116
2,4-Dichlorophenol	1.33	1.24		mg/Kg		93	61 - 116

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364505/2-A**

**Matrix: Solid**

**Analysis Batch: 364728**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 364505**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
4-Chloroaniline	1.33	1.18		mg/Kg		88	10 - 150
2,4,6-Trichlorophenol	1.33	1.20		mg/Kg		90	50 - 120
2,4,5-Trichlorophenol	1.33	1.25		mg/Kg		94	42 - 119
Hexachlorocyclopentadiene	1.33	0.953		mg/Kg		71	10 - 116
2-Methylnaphthalene	1.33	1.15		mg/Kg		86	55 - 120
2-Nitroaniline	1.33	1.22		mg/Kg		92	52 - 121
2-Chloronaphthalene	1.33	1.17		mg/Kg		88	57 - 112
4-Chloro-3-methylphenol	1.33	1.27		mg/Kg		95	59 - 117
2,6-Dinitrotoluene	1.33	1.27		mg/Kg		95	57 - 118
2-Nitrophenol	1.33	1.23		mg/Kg		92	58 - 121
3-Nitroaniline	1.33	1.37		mg/Kg		103	20 - 144
Dimethyl phthalate	1.33	1.18		mg/Kg		89	60 - 112
2,4-Dinitrophenol	2.67	0.862		mg/Kg		32	10 - 110
Acenaphthylene	1.33	1.13		mg/Kg		85	57 - 116
2,4-Dinitrotoluene	1.33	1.23		mg/Kg		92	59 - 119
Acenaphthene	1.33	1.17		mg/Kg		87	52 - 113
Dibenzofuran	1.33	1.19		mg/Kg		89	59 - 110
4-Nitrophenol	2.67	2.50		mg/Kg		94	32 - 123
Fluorene	1.33	1.19		mg/Kg		90	56 - 115
4-Nitroaniline	1.33	1.60		mg/Kg		120	55 - 146
4-Bromophenyl phenyl ether	1.33	1.26		mg/Kg		94	61 - 124
Hexachlorobenzene	1.33	1.27		mg/Kg		95	62 - 126
Diethyl phthalate	1.33	1.19		mg/Kg		89	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.26		mg/Kg		95	61 - 111
Pentachlorophenol	2.67	1.87		mg/Kg		70	12 - 116
N-Nitrosodiphenylamine	1.33	1.21		mg/Kg		91	62 - 117
4,6-Dinitro-2-methylphenol	2.67	1.46		mg/Kg		55	10 - 110
Phenanthrene	1.33	1.19		mg/Kg		89	58 - 125
Anthracene	1.33	1.20		mg/Kg		90	57 - 118
Carbazole	1.33	1.59		mg/Kg		119	65 - 137
Di-n-butyl phthalate	1.33	1.23		mg/Kg		92	61 - 123
Fluoranthene	1.33	1.21		mg/Kg		90	61 - 124
Pyrene	1.33	1.21		mg/Kg		91	60 - 115
Butyl benzyl phthalate	1.33	1.22		mg/Kg		91	61 - 115
Benzo[a]anthracene	1.33	1.30		mg/Kg		97	63 - 115
Chrysene	1.33	1.19		mg/Kg		89	63 - 118
3,3'-Dichlorobenzidine	1.33	1.14		mg/Kg		86	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.23		mg/Kg		92	62 - 117
Di-n-octyl phthalate	1.33	1.26		mg/Kg		95	58 - 129
Benzo[b]fluoranthene	1.33	1.32		mg/Kg		99	61 - 123
Benzo[k]fluoranthene	1.33	1.23		mg/Kg		92	59 - 125
Benzo[a]pyrene	1.33	1.25		mg/Kg		94	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.27		mg/Kg		95	50 - 149
Dibenz(a,h)anthracene	1.33	1.30		mg/Kg		98	61 - 134
Benzo[g,h,i]perylene	1.33	1.29		mg/Kg		97	55 - 134
3 & 4 Methylphenol	1.33	1.23		mg/Kg		92	55 - 124

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364505/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364728**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364505**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	100		40 - 130
Phenol-d5	99		36 - 123
Nitrobenzene-d5	94		33 - 124
2-Fluorobiphenyl	86		42 - 115
2,4,6-Tribromophenol	102		25 - 130
Terphenyl-d14	97		25 - 150

**Lab Sample ID: 500-120882-2 MS**  
**Matrix: Solid**  
**Analysis Batch: 364962**

**Client Sample ID: 1314V3-57-B02 (0-3)**  
**Prep Type: Total/NA**  
**Prep Batch: 364505**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.19	F1	1.48	1.89	F1	mg/Kg	☼	127	55 - 118
Bis(2-chloroethyl)ether	<0.19		1.48	1.58		mg/Kg	☼	106	53 - 116
1,3-Dichlorobenzene	<0.19		1.48	1.33		mg/Kg	☼	90	56 - 110
1,4-Dichlorobenzene	<0.19		1.48	1.36		mg/Kg	☼	92	57 - 110
1,2-Dichlorobenzene	<0.19		1.48	1.34		mg/Kg	☼	90	56 - 110
2-Methylphenol	<0.19		1.48	1.60		mg/Kg	☼	108	53 - 123
2,2'-oxybis[1-chloropropane]	<0.19		1.48	1.51		mg/Kg	☼	101	22 - 133
N-Nitrosodi-n-propylamine	<0.074		1.48	1.68		mg/Kg	☼	113	56 - 119
Hexachloroethane	<0.19		1.48	1.29		mg/Kg	☼	87	54 - 111
2-Chlorophenol	<0.19		1.48	1.40		mg/Kg	☼	95	57 - 117
Nitrobenzene	<0.037		1.48	1.64		mg/Kg	☼	111	56 - 121
Bis(2-chloroethoxy)methane	<0.19		1.48	1.60		mg/Kg	☼	108	59 - 116
1,2,4-Trichlorobenzene	<0.19		1.48	1.36		mg/Kg	☼	92	60 - 116
Isophorone	<0.19		1.48	1.41		mg/Kg	☼	95	54 - 120
2,4-Dimethylphenol	<0.37		1.48	1.41		mg/Kg	☼	95	50 - 120
Hexachlorobutadiene	<0.19		1.48	1.27		mg/Kg	☼	85	56 - 120
Naphthalene	0.023	J	1.48	1.39		mg/Kg	☼	92	58 - 116
2,4-Dichlorophenol	<0.37		1.48	1.47		mg/Kg	☼	99	61 - 116
4-Chloroaniline	<0.74		1.48	1.57		mg/Kg	☼	106	10 - 150
2,4,6-Trichlorophenol	<0.37		1.48	1.25		mg/Kg	☼	84	50 - 120
2,4,5-Trichlorophenol	<0.37		1.48	1.38		mg/Kg	☼	93	42 - 119
Hexachlorocyclopentadiene	<0.74	F1	1.48	<0.75	F1	mg/Kg	☼	0	10 - 116
2-Methylnaphthalene	0.0098	J	1.48	1.38		mg/Kg	☼	92	55 - 120
2-Nitroaniline	<0.19		1.48	1.70		mg/Kg	☼	114	52 - 121
2-Chloronaphthalene	<0.19		1.48	1.43		mg/Kg	☼	96	57 - 112
4-Chloro-3-methylphenol	<0.37		1.48	1.62		mg/Kg	☼	109	59 - 117
2,6-Dinitrotoluene	<0.19		1.48	1.47		mg/Kg	☼	99	57 - 118
2-Nitrophenol	<0.37		1.48	1.52		mg/Kg	☼	102	58 - 121
3-Nitroaniline	<0.37		1.48	1.48		mg/Kg	☼	100	20 - 144
Dimethyl phthalate	<0.19		1.48	1.36		mg/Kg	☼	91	60 - 112
2,4-Dinitrophenol	<0.74		2.97	2.85		mg/Kg	☼	96	10 - 110
Acenaphthylene	0.0060	J	1.48	1.39		mg/Kg	☼	93	57 - 116
2,4-Dinitrotoluene	<0.19		1.48	1.51		mg/Kg	☼	102	59 - 119
Acenaphthene	0.016	J	1.48	1.32		mg/Kg	☼	88	52 - 113
Dibenzofuran	<0.19		1.48	1.44		mg/Kg	☼	97	59 - 110
4-Nitrophenol	<0.74		2.97	2.32		mg/Kg	☼	78	32 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120882-2 MS**

**Matrix: Solid**

**Analysis Batch: 364962**

**Client Sample ID: 1314V3-57-B02 (0-3)**

**Prep Type: Total/NA**

**Prep Batch: 364505**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Fluorene	0.014	J	1.48	1.47		mg/Kg	☼	98	56 - 115
4-Nitroaniline	<0.37	F1	1.48	2.18	F1	mg/Kg	☼	147	55 - 146
4-Bromophenyl phenyl ether	<0.19		1.48	1.48		mg/Kg	☼	100	61 - 124
Hexachlorobenzene	<0.074		1.48	1.45		mg/Kg	☼	98	62 - 126
Diethyl phthalate	<0.19		1.48	1.60		mg/Kg	☼	108	58 - 117
4-Chlorophenyl phenyl ether	<0.19		1.48	1.50		mg/Kg	☼	101	61 - 111
Pentachlorophenol	<0.74	F1	2.97	<0.75	F1	mg/Kg	☼	0	12 - 116
N-Nitrosodiphenylamine	<0.19		1.48	1.53		mg/Kg	☼	103	62 - 117
4,6-Dinitro-2-methylphenol	<0.74		2.97	3.03		mg/Kg	☼	102	10 - 110
Phenanthrene	0.14		1.48	1.50		mg/Kg	☼	92	58 - 125
Anthracene	0.034	J	1.48	1.48		mg/Kg	☼	97	57 - 118
Carbazole	<0.19		1.48	1.76		mg/Kg	☼	119	65 - 137
Di-n-butyl phthalate	<0.19		1.48	1.52		mg/Kg	☼	102	61 - 123
Fluoranthene	0.22		1.48	1.58		mg/Kg	☼	92	61 - 124
Pyrene	0.20		1.48	1.51		mg/Kg	☼	89	60 - 115
Butyl benzyl phthalate	<0.19		1.48	1.62		mg/Kg	☼	109	61 - 115
Benzo[a]anthracene	0.12		1.48	1.55		mg/Kg	☼	96	63 - 115
Chrysene	0.11		1.48	1.46		mg/Kg	☼	91	63 - 118
3,3'-Dichlorobenzidine	<0.19		1.48	0.836		mg/Kg	☼	56	40 - 110
Bis(2-ethylhexyl) phthalate	<0.19		1.48	1.67		mg/Kg	☼	112	62 - 117
Di-n-octyl phthalate	<0.19		1.48	1.61		mg/Kg	☼	109	58 - 129
Benzo[b]fluoranthene	0.17		1.48	1.66		mg/Kg	☼	100	61 - 123
Benzo[k]fluoranthene	0.075		1.48	1.60		mg/Kg	☼	103	59 - 125
Benzo[a]pyrene	0.16		1.48	1.85		mg/Kg	☼	114	64 - 122
Indeno[1,2,3-cd]pyrene	0.082		1.48	1.21		mg/Kg	☼	76	50 - 149
Dibenz(a,h)anthracene	0.026	J	1.48	1.23		mg/Kg	☼	81	61 - 134
Benzo[g,h,i]perylene	0.074		1.48	1.09		mg/Kg	☼	69	55 - 134
3 & 4 Methylphenol	<0.19		1.48	1.69		mg/Kg	☼	114	55 - 124

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	107		40 - 130
Phenol-d5	115		36 - 123
Nitrobenzene-d5	103		33 - 124
2-Fluorobiphenyl	88		42 - 115
2,4,6-Tribromophenol	84		25 - 130
Terphenyl-d14	106		25 - 150

**Lab Sample ID: 500-120882-2 MSD**

**Matrix: Solid**

**Analysis Batch: 364962**

**Client Sample ID: 1314V3-57-B02 (0-3)**

**Prep Type: Total/NA**

**Prep Batch: 364505**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Phenol	<0.19	F1	1.43	1.73	F1	mg/Kg	☼	121	55 - 118	9	30
Bis(2-chloroethyl)ether	<0.19		1.43	1.45		mg/Kg	☼	102	53 - 116	8	30
1,3-Dichlorobenzene	<0.19		1.43	1.25		mg/Kg	☼	87	56 - 110	7	30
1,4-Dichlorobenzene	<0.19		1.43	1.28		mg/Kg	☼	89	57 - 110	7	30
1,2-Dichlorobenzene	<0.19		1.43	1.25		mg/Kg	☼	88	56 - 110	7	30
2-Methylphenol	<0.19		1.43	1.73		mg/Kg	☼	121	53 - 123	8	30

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120882-2 MSD**

**Matrix: Solid**

**Analysis Batch: 364962**

**Client Sample ID: 1314V3-57-B02 (0-3)**

**Prep Type: Total/NA**

**Prep Batch: 364505**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.19		1.43	1.49		mg/Kg	☼	105	22 - 133	1	30
N-Nitrosodi-n-propylamine	<0.074		1.43	1.62		mg/Kg	☼	113	56 - 119	4	30
Hexachloroethane	<0.19		1.43	1.27		mg/Kg	☼	89	54 - 111	2	30
2-Chlorophenol	<0.19		1.43	1.34		mg/Kg	☼	94	57 - 117	5	30
Nitrobenzene	<0.037		1.43	1.57		mg/Kg	☼	110	56 - 121	4	30
Bis(2-chloroethoxy)methane	<0.19		1.43	1.51		mg/Kg	☼	106	59 - 116	6	30
1,2,4-Trichlorobenzene	<0.19		1.43	1.23		mg/Kg	☼	86	60 - 116	10	30
Isophorone	<0.19		1.43	1.36		mg/Kg	☼	95	54 - 120	4	30
2,4-Dimethylphenol	<0.37		1.43	1.30		mg/Kg	☼	91	50 - 120	8	30
Hexachlorobutadiene	<0.19		1.43	1.13		mg/Kg	☼	80	56 - 120	11	30
Naphthalene	0.023	J	1.43	1.26		mg/Kg	☼	87	58 - 116	10	30
2,4-Dichlorophenol	<0.37		1.43	1.33		mg/Kg	☼	93	61 - 116	10	30
4-Chloroaniline	<0.74		1.43	1.37		mg/Kg	☼	96	10 - 150	13	30
2,4,6-Trichlorophenol	<0.37		1.43	1.15		mg/Kg	☼	81	50 - 120	8	30
2,4,5-Trichlorophenol	<0.37		1.43	1.19		mg/Kg	☼	83	42 - 119	15	30
Hexachlorocyclopentadiene	<0.74	F1	1.43	<0.72	F1	mg/Kg	☼	0	10 - 116	NC	30
2-Methylnaphthalene	0.0098	J	1.43	1.28		mg/Kg	☼	89	55 - 120	7	30
2-Nitroaniline	<0.19		1.43	1.60		mg/Kg	☼	112	52 - 121	6	30
2-Chloronaphthalene	<0.19		1.43	1.34		mg/Kg	☼	94	57 - 112	7	30
4-Chloro-3-methylphenol	<0.37		1.43	1.49		mg/Kg	☼	104	59 - 117	9	30
2,6-Dinitrotoluene	<0.19		1.43	1.39		mg/Kg	☼	97	57 - 118	5	30
2-Nitrophenol	<0.37		1.43	1.40		mg/Kg	☼	98	58 - 121	8	30
3-Nitroaniline	<0.37		1.43	1.40		mg/Kg	☼	98	20 - 144	5	30
Dimethyl phthalate	<0.19		1.43	1.29		mg/Kg	☼	91	60 - 112	5	30
2,4-Dinitrophenol	<0.74		2.85	2.42		mg/Kg	☼	85	10 - 110	16	30
Acenaphthylene	0.0060	J	1.43	1.30		mg/Kg	☼	90	57 - 116	7	30
2,4-Dinitrotoluene	<0.19		1.43	1.36		mg/Kg	☼	96	59 - 119	10	30
Acenaphthene	0.016	J	1.43	1.19		mg/Kg	☼	82	52 - 113	10	30
Dibenzofuran	<0.19		1.43	1.31		mg/Kg	☼	92	59 - 110	9	30
4-Nitrophenol	<0.74		2.85	1.76		mg/Kg	☼	62	32 - 123	28	30
Fluorene	0.014	J	1.43	1.34		mg/Kg	☼	93	56 - 115	9	30
4-Nitroaniline	<0.37	F1	1.43	1.93		mg/Kg	☼	135	55 - 146	12	30
4-Bromophenyl phenyl ether	<0.19		1.43	1.32		mg/Kg	☼	93	61 - 124	11	30
Hexachlorobenzene	<0.074		1.43	1.28		mg/Kg	☼	90	62 - 126	12	30
Diethyl phthalate	<0.19		1.43	1.39		mg/Kg	☼	98	58 - 117	14	30
4-Chlorophenyl phenyl ether	<0.19		1.43	1.33		mg/Kg	☼	93	61 - 111	12	30
Pentachlorophenol	<0.74	F1	2.85	<0.72	F1	mg/Kg	☼	0	12 - 116	NC	30
N-Nitrosodiphenylamine	<0.19		1.43	1.34		mg/Kg	☼	94	62 - 117	14	30
4,6-Dinitro-2-methylphenol	<0.74		2.85	2.58		mg/Kg	☼	90	10 - 110	16	30
Phenanthrene	0.14		1.43	1.36		mg/Kg	☼	86	58 - 125	10	30
Anthracene	0.034	J	1.43	1.31		mg/Kg	☼	90	57 - 118	12	30
Carbazole	<0.19		1.43	1.56		mg/Kg	☼	109	65 - 137	12	30
Di-n-butyl phthalate	<0.19		1.43	1.34		mg/Kg	☼	94	61 - 123	13	30
Fluoranthene	0.22		1.43	1.39		mg/Kg	☼	82	61 - 124	13	30
Pyrene	0.20		1.43	1.28		mg/Kg	☼	76	60 - 115	16	30
Butyl benzyl phthalate	<0.19		1.43	1.41		mg/Kg	☼	99	61 - 115	14	30
Benzo[a]anthracene	0.12		1.43	1.39		mg/Kg	☼	89	63 - 115	11	30
Chrysene	0.11		1.43	1.31		mg/Kg	☼	84	63 - 118	11	30

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-120882-2 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364962**

**Client Sample ID: 1314V3-57-B02 (0-3)**  
**Prep Type: Total/NA**  
**Prep Batch: 364505**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
3,3'-Dichlorobenzidine	<0.19		1.43	0.798		mg/Kg	☼	56	40 - 110	5	30
Bis(2-ethylhexyl) phthalate	<0.19		1.43	1.49		mg/Kg	☼	104	62 - 117	11	30
Di-n-octyl phthalate	<0.19		1.43	1.55		mg/Kg	☼	109	58 - 129	4	30
Benzo[b]fluoranthene	0.17		1.43	1.60		mg/Kg	☼	100	61 - 123	4	30
Benzo[k]fluoranthene	0.075		1.43	1.55		mg/Kg	☼	104	59 - 125	3	30
Benzo[a]pyrene	0.16		1.43	1.71		mg/Kg	☼	109	64 - 122	8	30
Indeno[1,2,3-cd]pyrene	0.082		1.43	1.09		mg/Kg	☼	71	50 - 149	11	30
Dibenz(a,h)anthracene	0.026	J	1.43	1.11		mg/Kg	☼	76	61 - 134	10	30
Benzo[g,h,i]perylene	0.074		1.43	0.972		mg/Kg	☼	63	55 - 134	12	30
3 & 4 Methylphenol	<0.19		1.43	1.64		mg/Kg	☼	115	55 - 124	3	30
<b>MSD MSD</b>											
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
2-Fluorophenol	103		40 - 130								
Phenol-d5	113		36 - 123								
Nitrobenzene-d5	102		33 - 124								
2-Fluorobiphenyl	89		42 - 115								
2,4,6-Tribromophenol	75		25 - 130								
Terphenyl-d14	95		25 - 150								

## Method: 6010B - Metals (ICP)

**Lab Sample ID: LCS 500-363820/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363820**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Lead	0.100	0.0893		mg/L		89	80 - 120
Manganese	0.500	0.467		mg/L		93	80 - 120

**Lab Sample ID: LCS 500-363822/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364126**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363822**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Barium	2.00	1.95		mg/L		98	80 - 120
Beryllium	0.0500	0.0495		mg/L		99	80 - 120
Boron	1.00	0.882		mg/L		88	80 - 120
Cadmium	0.0500	0.0476		mg/L		95	80 - 120
Chromium	0.200	0.190		mg/L		95	80 - 120
Cobalt	0.500	0.486		mg/L		97	80 - 120
Iron	1.00	0.989		mg/L		99	80 - 120
Lead	0.100	0.0935		mg/L		94	80 - 120
Manganese	0.500	0.488		mg/L		98	80 - 120
Nickel	0.500	0.483		mg/L		97	80 - 120
Selenium	0.100	0.0929		mg/L		93	80 - 120
Silver	0.0500	0.0446		mg/L		89	80 - 120
Zinc	0.500	0.471	J	mg/L		94	80 - 120

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-363940/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363940**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.42	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Barium	<1.0		1.0	0.18	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Boron	<5.0		5.0	0.70	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Calcium	<20		20	6.4	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Chromium	0.637	J	1.0	0.17	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Copper	<1.0		1.0	0.22	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Iron	<20		20	7.7	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Lead	<0.50		0.50	0.25	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Magnesium	<10		10	4.1	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Nickel	0.284	J	1.0	0.27	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Potassium	<50		50	8.2	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Silver	<0.50		0.50	0.12	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Sodium	<100		100	13	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/07/16 08:30	12/07/16 15:49	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/07/16 08:30	12/07/16 15:49	1

**Lab Sample ID: LCS 500-363940/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363940**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	43.2		mg/Kg		86	80 - 120
Arsenic	10.0	8.79		mg/Kg		88	80 - 120
Barium	200	181		mg/Kg		91	80 - 120
Beryllium	5.00	4.60		mg/Kg		92	80 - 120
Boron	100	85.3		mg/Kg		85	80 - 120
Cadmium	5.00	4.54		mg/Kg		91	80 - 120
Calcium	1000	940		mg/Kg		94	80 - 120
Chromium	20.0	19.5		mg/Kg		97	80 - 120
Cobalt	50.0	45.6		mg/Kg		91	80 - 120
Copper	25.0	23.0		mg/Kg		92	80 - 120
Iron	100	103		mg/Kg		103	80 - 120
Lead	10.0	9.29		mg/Kg		93	80 - 120
Magnesium	1000	911		mg/Kg		91	80 - 120
Manganese	50.0	49.2		mg/Kg		98	80 - 120
Nickel	50.0	46.1		mg/Kg		92	80 - 120
Potassium	1000	948		mg/Kg		95	80 - 120
Selenium	10.0	8.30		mg/Kg		83	80 - 120
Silver	5.00	4.51		mg/Kg		90	80 - 120
Sodium	1000	923		mg/Kg		92	80 - 120
Thallium	10.0	9.09		mg/Kg		91	80 - 120

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-363940/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363940**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Vanadium	50.0	48.1		mg/Kg		96	80 - 120
Zinc	50.0	45.7		mg/Kg		91	80 - 120

**Lab Sample ID: 500-120882-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-57-B03 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 363940**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.32	J F1	25.7	6.44	F1	mg/Kg	☼	24	75 - 125
Arsenic	5.0	F1	5.15	7.76	F1	mg/Kg	☼	54	75 - 125
Barium	73	F1	103	142	F1	mg/Kg	☼	67	75 - 125
Beryllium	0.45		2.57	2.53		mg/Kg	☼	81	75 - 125
Boron	3.0	F1	51.5	36.2	F1	mg/Kg	☼	64	75 - 125
Cadmium	0.22	F1	2.57	2.01	F1	mg/Kg	☼	69	75 - 125
Calcium	11000	F2	515	4960	4	mg/Kg	☼	-1218	75 - 125
Chromium	12	B	10.3	23.2		mg/Kg	☼	113	75 - 125
Cobalt	5.3	F1	25.7	26.3		mg/Kg	☼	82	75 - 125
Copper	17	F1	12.9	20.8	F1	mg/Kg	☼	26	75 - 125
Iron	12000		51.5	14600	4	mg/Kg	☼	4104	75 - 125
Lead	14	F1	5.15	15.7	F1	mg/Kg	☼	24	75 - 125
Magnesium	6600	F2	515	3910	4	mg/Kg	☼	-528	75 - 125
Manganese	360		25.7	248	4	mg/Kg	☼	-447	75 - 125
Nickel	11	B F1	25.7	30.5	F1	mg/Kg	☼	74	75 - 125
Potassium	870	F1	515	1710	F1	mg/Kg	☼	162	75 - 125
Selenium	<0.55	F1	5.15	3.49	F1	mg/Kg	☼	68	75 - 125
Silver	<0.28		2.57	2.05		mg/Kg	☼	80	75 - 125
Sodium	780		515	1210		mg/Kg	☼	84	75 - 125
Thallium	0.77		5.15	4.70		mg/Kg	☼	76	75 - 125
Vanadium	20		25.7	43.3		mg/Kg	☼	91	75 - 125
Zinc	33	F1	25.7	53.3		mg/Kg	☼	78	75 - 125

**Lab Sample ID: 500-120882-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-57-B03 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 363940**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Antimony	0.32	J F1	25.9	6.34	F1	mg/Kg	☼	23	75 - 125	2	20
Arsenic	5.0	F1	5.18	7.91	F1	mg/Kg	☼	56	75 - 125	2	20
Barium	73	F1	104	142	F1	mg/Kg	☼	66	75 - 125	0	20
Beryllium	0.45		2.59	2.53		mg/Kg	☼	80	75 - 125	0	20
Boron	3.0	F1	51.8	38.8	F1	mg/Kg	☼	69	75 - 125	7	20
Cadmium	0.22	F1	2.59	2.10	F1	mg/Kg	☼	72	75 - 125	4	20
Calcium	11000	F2	518	11500	4 F2	mg/Kg	☼	51	75 - 125	79	20
Chromium	12	B	10.4	21.8		mg/Kg	☼	98	75 - 125	7	20
Cobalt	5.3	F1	25.9	24.5	F1	mg/Kg	☼	74	75 - 125	7	20
Copper	17	F1	12.9	23.7	F1	mg/Kg	☼	48	75 - 125	13	20
Iron	12000		51.8	12600	4	mg/Kg	☼	192	75 - 125	15	20
Lead	14	F1	5.18	17.1	F1	mg/Kg	☼	51	75 - 125	9	20
Magnesium	6600	F2	518	6090	4 F2	mg/Kg	☼	-103	75 - 125	44	20

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-120882-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-57-B03 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 363940**

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Manganese	360		25.9	263	4	mg/Kg	☼	-386	75 - 125	6	20
Nickel	11	B F1	25.9	30.6		mg/Kg	☼	75	75 - 125	0	20
Potassium	870	F1	518	1690	F1	mg/Kg	☼	158	75 - 125	1	20
Selenium	<0.55	F1	5.18	3.66	F1	mg/Kg	☼	71	75 - 125	5	20
Silver	<0.28		2.59	2.16		mg/Kg	☼	83	75 - 125	5	20
Sodium	780		518	1200		mg/Kg	☼	83	75 - 125	0	20
Thallium	0.77		5.18	4.81		mg/Kg	☼	78	75 - 125	2	20
Vanadium	20		25.9	43.0		mg/Kg	☼	90	75 - 125	1	20
Zinc	33	F1	25.9	51.0	F1	mg/Kg	☼	68	75 - 125	4	20

**Lab Sample ID: 500-120882-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-57-B03 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 363940**

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	0.32	J F1	0.244	J F5	mg/Kg	☼	26	20
Arsenic	5.0	F1	3.59	F3	mg/Kg	☼	33	20
Barium	73	F1	62.9		mg/Kg	☼	15	20
Beryllium	0.45		0.422		mg/Kg	☼	6	20
Boron	3.0	F1	2.99		mg/Kg	☼	0.6	20
Cadmium	0.22	F1	0.178	F5	mg/Kg	☼	21	20
Calcium	11000	F2	10800		mg/Kg	☼	4	20
Chromium	12	B	11.3		mg/Kg	☼	3	20
Cobalt	5.3	F1	4.26	F3	mg/Kg	☼	23	20
Copper	17	F1	15.9		mg/Kg	☼	9	20
Iron	12000		11000		mg/Kg	☼	12	20
Lead	14	F1	15.8		mg/Kg	☼	9	20
Magnesium	6600	F2	6570		mg/Kg	☼	0.8	20
Manganese	360		197	F3	mg/Kg	☼	59	20
Nickel	11	B F1	10.1		mg/Kg	☼	12	20
Potassium	870	F1	878		mg/Kg	☼	0.6	20
Selenium	<0.55	F1	<0.52		mg/Kg	☼	NC	20
Silver	<0.28		<0.26		mg/Kg	☼	NC	20
Sodium	780		723		mg/Kg	☼	7	20
Thallium	0.77		0.537	F5	mg/Kg	☼	36	20
Vanadium	20		18.0		mg/Kg	☼	9	20
Zinc	33	F1	30.5		mg/Kg	☼	9	20

**Lab Sample ID: LB 500-363729/1-D**  
**Matrix: Solid**  
**Analysis Batch: 364126**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363822**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 13:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:16	12/07/16 13:28	1
Boron	<0.50		0.50	0.050	mg/L		12/06/16 14:16	12/07/16 13:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:16	12/07/16 13:28	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 13:28	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 13:28	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-363729/1-D**  
**Matrix: Solid**  
**Analysis Batch: 364126**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363822**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:16	12/07/16 13:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:16	12/07/16 13:28	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 13:28	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 13:28	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:16	12/07/16 13:28	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:16	12/07/16 13:28	1
Zinc	0.105	J	0.50	0.020	mg/L		12/06/16 14:16	12/07/16 13:28	1

**Lab Sample ID: LB 500-363721/1-B**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 363820**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:13	12/07/16 19:35	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 14:13	12/07/16 19:35	1

**Lab Sample ID: 500-120882-16 MS**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-01-B20 (0-6)**  
**Prep Type: SPLP East**  
**Prep Batch: 363820**

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Manganese	0.44		0.500	1.04		mg/L		120	50 - 150

**Lab Sample ID: 500-120882-16 DU**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-01-B20 (0-6)**  
**Prep Type: SPLP East**  
**Prep Batch: 363820**

Analyte	Sample	Sample	DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Manganese	0.44		0.426		mg/L		3	20

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: LCS 500-363822/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364154**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363822**

Analyte	Spike	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.453		mg/L		91	80 - 120
Thallium	0.100	0.0934		mg/L		93	80 - 120

**Lab Sample ID: LB 500-363729/1-D**  
**Matrix: Solid**  
**Analysis Batch: 364154**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363822**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:16	12/07/16 19:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:16	12/07/16 19:14	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 7470A - TCLP Mercury

**Lab Sample ID: MB 500-363806/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363806**

Analyte	MB Result	MB 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 10:05	1

**Lab Sample ID: LCS 500-363806/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363806**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00194		mg/L		97	80 - 120

**Lab Sample ID: LB 500-363729/1-C**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363806**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:08	1

**Lab Sample ID: 500-120882-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: 1314V3-57-B03 (0-5)**  
**Prep Type: TCLP**  
**Prep Batch: 363806**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000921		mg/L		92	50 - 150

**Lab Sample ID: 500-120882-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: 1314V3-57-B03 (0-5)**  
**Prep Type: TCLP**  
**Prep Batch: 363806**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-363620/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363848**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363620**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg		12/05/16 14:30	12/06/16 14:00	1

**Lab Sample ID: LCS 500-363620/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363848**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363620**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.155		mg/Kg		93	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## Method: 9045D - pH

Lab Sample ID: 500-120882-2 DU  
Matrix: Solid  
Analysis Batch: 363978

Client Sample ID: 1314V3-57-B02 (0-3)  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.4		8.4		SU		0.4	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 19:48	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:18	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:21	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:09	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978		SMO	TAL CHI
					(Start)	12/06/16 14:47		
					(End)	12/06/16 14:51		
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 13:39	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/13/16 23:58	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 16:25	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:17	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 19:55	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:22	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	364154	12/07/16 19:25	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:17	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 14:51 (End) 12/06/16 14:54	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 14:04	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 00:23	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 16:59	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:18	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:27	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:28	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:18	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 14:58 (End) 12/06/16 15:01	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 14:29	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 02:06	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 17:06	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:23	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 20:24	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:32	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:32	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:20	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:01 (End) 12/06/16 15:05	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 14:54	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 02:31	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 17:13	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:24	MJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-56-B02 (0-3)**

**Lab Sample ID: 500-120882-5**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 20:31	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:37	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:35	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:21	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978		SMO	TAL CHI
					(Start)	12/06/16 15:05		
					(End)	12/06/16 15:09		
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**Client Sample ID: 1314V3-56-B02 (0-3)**

**Lab Sample ID: 500-120882-5**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 83.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 15:19	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 02:57	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 17:35	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:26	MJD	TAL CHI

**Client Sample ID: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 20:38	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:42	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	364154	12/07/16 19:39	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:23	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:09 (End) 12/06/16 15:12	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**Client Sample ID: 1314V3-56-B02 (0-3)D**

**Lab Sample ID: 500-120882-6**

**Date Collected: 12/01/16 10:50**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 83.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 15:44	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 03:23	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 17:42	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:27	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 20:44	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:46	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:42	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:24	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:12 (End) 12/06/16 15:16	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 16:08	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 03:48	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 17:49	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:29	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 20:51	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:51	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:45	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:26	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:16 (End) 12/06/16 15:19	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 11:59	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 04:14	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 17:55	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:30	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 20:58	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 14:56	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:56	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:27	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:19 (End) 12/06/16 15:23	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 16:58	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 04:40	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 18:02	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:32	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 15:01	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 19:59	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	7470A		1	363991	12/07/16 10:29	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:23 (End) 12/06/16 15:27	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 17:23	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 05:05	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 18:09	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		50	363848	12/06/16 15:46	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 15:14	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:03	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:30	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:27 (End) 12/06/16 15:30	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 17:49	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 05:31	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 18:16	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:35	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 21:18	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 15:19	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:06	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:35	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978		SMO	TAL CHI
					(Start)	12/06/16 15:30		
					(End)	12/06/16 15:34		
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 18:15	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 05:57	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 18:22	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:36	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 15:23	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:09	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:36	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:34 (End) 12/06/16 15:37	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 18:40	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 06:22	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 18:29	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:41	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

**Date Collected: 12/01/16 16:10**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 21:48	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 15:28	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:13	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

**Date Collected: 12/01/16 16:10**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	7470A		1	363991	12/07/16 10:37	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:37 (End) 12/06/16 15:41	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B30 (0-6)**

**Lab Sample ID: 500-120882-14**

**Date Collected: 12/01/16 16:10**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 85.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 19:06	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 06:48	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 18:36	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:43	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B31 (0-6)**

**Lab Sample ID: 500-120882-15**

**Date Collected: 12/01/16 16:20**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 21:54	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 15:33	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:16	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:39	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:41 (End) 12/06/16 15:45	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Client Sample ID: 1314V3-01-B31 (0-6)**

**Lab Sample ID: 500-120882-15**

**Date Collected: 12/01/16 16:20**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 19:31	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 07:13	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 18:59	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:44	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B20 (0-6)**

**Lab Sample ID: 500-120882-16**

**Date Collected: 12/01/16 16:45**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363721	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363820	12/06/16 14:13	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/07/16 22:01	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6010B		1	364126	12/07/16 15:38	PJ1	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363822	12/06/16 14:16	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:20	FXG	TAL CHI
TCLP	Leach	1311			363729	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363806	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:40	MJD	TAL CHI
Total/NA	Analysis	9045D		1	363978	(Start) 12/06/16 15:45 (End) 12/06/16 15:48	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363399	12/02/16 15:02	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B20 (0-6)**

**Lab Sample ID: 500-120882-16**

**Date Collected: 12/01/16 16:45**

**Matrix: Solid**

**Date Received: 12/02/16 10:10**

**Percent Solids: 88.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363513	12/02/16 16:10	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363745	12/06/16 19:55	DJD	TAL CHI
Total/NA	Prep	3541			364505	12/10/16 09:29	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364962	12/14/16 07:39	GES	TAL CHI
Total/NA	Prep	3050B			363940	12/07/16 08:30	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364150	12/07/16 19:05	PJ1	TAL CHI
Total/NA	Prep	7471B			363620	12/05/16 14:30	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 14:46	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Certification Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120882-1

## 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: 708.534.5201



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: ES46-11  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: 210.33

Client <u>EE</u>		Client Project # <u>1009008-0046-01</u>		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 <u>F74</u>		Project Location/State <u>Rock Island County, IL</u>		Parameter								
Lab Project # <u>SU012744</u>		Lab PM <u>D Wright</u>										
Sampler <u>S. Cooper</u>												
Lab ID	MS/MSD	Sample ID	Sampling Date Time		# of Containers	Matrix	VOC	SVOC	Total PAH metals	TC/PLS/SP PAH metals	Pb/Cd/Cr/Se/17	Comments
1		1314V3-57-B03(0-5)	12-17-16	0925	2 S	S	X	X	X	X	X	64608
2		1314V3-57-B02(0-3)	12-17-16	0955	2 S	S	X	X	X	X	X	
3		1314V3-57-B01(0-3)	12-17-16	1015	2 S	S	X	X	X	X	X	
<del>_____</del> <u>6</u> <u>12-1-16</u>												

Turnaround Time Required (Business Days) \_\_\_\_\_  
Requested Due Date \_\_\_\_\_

Sample Disposal:  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>EE</u>	Date: <u>12-17-16</u>	Time: <u>1730</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CHT</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>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 - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments: \_\_\_\_\_

Lab Comments: \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
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: EGM6-12  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: \_\_\_\_\_

Client <u>EE</u>		Client Project # <u>1009008-0046</u>		Preservative		Parameter		Matrix		Comments		
Project Name <u>IT4</u>		Project Location/State <u>Rock Island County, IL</u>		Lab Project # <u>S0012744</u>		Sampler <u>S. Cooper</u>		Lab PM <u>D. Wright</u>		Preservative Key		
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Voc	Svcs	Total Ar Metals	Twp/Spup Total Metals	pH/% Solids	Comments
			Date	Time								
<u>4</u>		<u>1314V3-56-B03(0-3)</u>	<u>12-1-16</u>	<u>1035</u>	<u>2</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>5</u>		<u>1314V3-56-B02(0-3)</u>	<u>12-1-16</u>	<u>1050</u>	<u>2</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>6</u>		<u>1314V3-56-B02(0-3)D</u>	<u>12-1-16</u>	<u>1050</u>	<u>2</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>7</u>		<u>1314V3-56-B01(0-3)</u>	<u>12-1-16</u>	<u>1105</u>	<u>2</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	

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:

# 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: 6046-13

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter						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 #										
Project Location/State		Lab PM										
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix						
EE		1009008-0046-01										64608
ITH		50012744										
Rock Island County, IL		D. Wright										
S. Cooper												
8		1314V3-59-B01 (0-5)	12-1-16	1130	25	VOL	X	X	X	X	X	
9		1314V7-59-B01 (5-10)	12-1-16	1135	25	SUC	X	X	X	X	X	
<del>12-1-16</del>												

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 <i>[Signature]</i>	Company EE	Date 12-1-16	Time 1731	Received By <i>[Signature]</i>	Company TA-CRT	Date 12/2/16	Time 1010	Lab Courier
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped <i>[Signature]</i>
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: \_\_\_\_\_

# 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: EG46-14  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter		Matrix		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 #												
IT4		50012744												
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 PAC	Methyl	TUP (SP-P)	PAC METL	pH / % Sol.	Comments
			Date	Time										
10		1314V7-32-B308(0-3)	12-16	1205	25		X	X	X	X	X	X		64608
11		1314V3-32-B307(0-3)	12-16	1220	25		X	X	X	X	X	X		
<del>12-1-66</del>														

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
S/	VE	12-16	1730	Andrew Scott	TA-CHE	12/2/16	1010	
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped
								Fed X
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: \_\_\_\_\_

# 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: E946-18

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: \_\_\_\_\_

Client <u>IDOT</u>		Client Project # <u>1009058-004601</u>		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 <u>ITN</u>		Lab Project # <u>50812744</u>		Parameter								
Project Location/State <u>Rock Island County, IL</u>		Lab PM <u>D Wright</u>										
Sampler <u>S-Cooper</u>											Comments	
Lab ID	MS/MSD	Sample ID	Sampling Date Time		# of Containers	Matrix	VOC	SVOC	Total Metals	Trace Metals		Spills/Leakage
<u>12</u>		<u>1314 V3-26-B01 (0-8)</u>	<u>12-1-16</u>	<u>1405</u>	<u>25</u>		X	X	X	X	X	
<u>13</u>		<u>1314 V3-26-B02 (0-8)</u>	<u>12-1-16</u>	<u>1440</u>	<u>25</u>		X	X	X	X	X	
<u>12-1-16</u>												

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>CE</u>	Date <u>12-1-16</u>	Time <u>1730</u>	Received By <u>[Signature]</u>	Company <u>JA CHE</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-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:



# 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 #: 500-120882  
 Chain of Custody Number: E84616  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter		Sampler		Lab Project #		Lab PM		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		Project Location/State		Matrix		Matrix		Date		Time		# of Containers		
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix	
Comments														
EE		1004008-0036-01												
ITM														
		Rock Island County, IL												
S. Lopez														
14		1314V3-01-B30(0-6)	12-1-16	1610	25	X	X	X	X	X				
15		1314V3-01-B31(0-6)	12-1-16	1620	25	X	X	X	X	X				
16		1314V3-01-B32(0-6)	12-1-16	1645	25	X	X	X	X	X				
<i>By 12-1-16</i>														

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
<i>[Signature]</i>	EE	12-1-16	1730	<i>[Signature]</i>	TA-CRT	12/2/16	1010	
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped
								<i>Red X</i>
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: 500-120882-1

**Login Number: 120882**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	



# 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: 500-120935-1  
Client Project/Site: IDOT - I-74 - WO 046

For:  
Ecology and Environment, Inc.  
33 West Monroe St.  
Suite 1410  
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:  
12/16/2016 2:48:59 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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: 500-120935-1

## Job ID: 500-120935-1

### Laboratory: TestAmerica Chicago

#### Narrative

#### Job Narrative 500-120935-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 12/2/2016 4:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-364515 had 3 analytes outside control limits: 2,4-Dinitrophenol; 4-Nitroaniline; and Hexachlorocyclopentadiene. These results have been reported and qualified. (LCS 500-364515/2-A)

Method(s) 8270D: The following samples contained one base/neutral surrogate outside acceptance limits: 1314V3-01-B27 (0-8) (500-120935-2) and 1314V3-01-B27 (8-15) (500-120935-3). The laboratory's SOP allows one acid and one base/neutral surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The following sample required a dilution due to the nature of the sample matrix: 1314V3-01-B27 (8-15) (500-120935-3). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method(s) 6020A: The internal standard (Tb) was used to report the element Thallium in batch 500-364154. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Lab Sample ID: 500-120935-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	51	F1	0.50	0.091	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	2.6	F1	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	F1	0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000	F2	10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.50	0.086	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.7		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	9.5		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000	F2	5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	180	F2	0.50	0.099	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	740	F1 F2	25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	F1	0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	500		50	6.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.25	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	40		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.057	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0028	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	5.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA
pH	9.4		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.036		0.018	0.0080	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.30		0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.15		0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.20		0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.14		0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.071	J	0.19	0.045	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.12		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.50		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.46		0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.17	J	0.19	0.095	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.9		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	2.0		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
3,3'-Dichlorobenzidine	0.15	J	0.19	0.053	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.69		0.19	0.070	mg/Kg	1	☼	8270D	Total/NA
Pyrene - DL	3.3		0.38	0.076	mg/Kg	10	☼	8270D	Total/NA
Chrysene - DL	4.1		0.38	0.10	mg/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	17		0.38	0.082	mg/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene - DL	5.2		0.38	0.11	mg/Kg	10	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (0-8) (Continued)**

**Lab Sample ID: 500-120935-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene - DL	11		0.38	0.074	mg/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene - DL	5.8		0.38	0.099	mg/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene - DL	2.1		0.38	0.074	mg/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene - DL	6.0		0.38	0.12	mg/Kg	10	☼	8270D	Total/NA
Arsenic	4.7		0.46	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	210		0.46	0.084	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.18	0.040	mg/Kg	1	☼	6010B	Total/NA
Boron	9.7		2.3	0.32	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.2		0.092	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	21000		9.2	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	26	B	0.46	0.079	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.23	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	51	B	0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	9.2	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	1600		0.23	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5700		4.6	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	200		0.46	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.46	0.12	mg/Kg	1	☼	6010B	Total/NA
Potassium	600		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	480		46	6.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.23	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	680		0.92	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	0.89		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.079	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0086		0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.37		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	6.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.97	B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	1.4		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.74		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.19		0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B27 (8-15)**

**Lab Sample ID: 500-120935-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
Ethylbenzene	0.045		0.0016	0.00078	mg/Kg	1	☼	8260B	Total/NA
Tetrachloroethene	0.0025		0.0016	0.00055	mg/Kg	1	☼	8260B	Total/NA
Toluene	0.0078		0.0016	0.00041	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.27		0.0032	0.00052	mg/Kg	1	☼	8260B	Total/NA
Acenaphthylene	0.91		0.037	0.0048	mg/Kg	1	☼	8270D	Total/NA
Naphthalene - DL	15		0.73	0.11	mg/Kg	20	☼	8270D	Total/NA
2-Methylnaphthalene - DL	19		1.5	0.14	mg/Kg	20	☼	8270D	Total/NA
Acenaphthene - DL	33		0.73	0.13	mg/Kg	20	☼	8270D	Total/NA
Dibenzofuran - DL	24		3.7	0.86	mg/Kg	20	☼	8270D	Total/NA
Fluorene - DL	32		0.73	0.10	mg/Kg	20	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (8-15) (Continued)**

**Lab Sample ID: 500-120935-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene - DL	22		0.73	0.12	mg/Kg	20	☼	8270D	Total/NA
Carbazole - DL	4.8		3.7	1.8	mg/Kg	20	☼	8270D	Total/NA
Pyrene - DL	45		0.73	0.15	mg/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene - DL	18		0.73	0.099	mg/Kg	20	☼	8270D	Total/NA
Chrysene - DL	18		0.73	0.20	mg/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	16		0.73	0.16	mg/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene - DL	5.9		0.73	0.22	mg/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene - DL	10		0.73	0.14	mg/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene - DL	2.5		0.73	0.19	mg/Kg	20	☼	8270D	Total/NA
Dibenz(a,h)anthracene - DL	0.86		0.73	0.14	mg/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene - DL	1.9		0.73	0.24	mg/Kg	20	☼	8270D	Total/NA
Phenanthrene - DL2	98		3.7	0.51	mg/Kg	100	☼	8270D	Total/NA
Fluoranthene - DL2	74		3.7	0.68	mg/Kg	100	☼	8270D	Total/NA
Arsenic	5.1		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	4.0		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.37		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.4	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.9		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	17	B	0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	49		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	620		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	410		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	100		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.87		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	5.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.058	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B27 (15-22)**

**Lab Sample ID: 500-120935-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.017	J	0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.017	J	0.074	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.045		0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.036		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.089		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (15-22) (Continued)**

**Lab Sample ID: 500-120935-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.021	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.11		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.088		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.061		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.063		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.091		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.034	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.058		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0093	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		0.51	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.51	0.093	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.20	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	2.5	0.36	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000		10	3.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.51	0.087	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.1		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Copper	12	B	0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.25	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.1	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.51	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	630		25	4.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.31	J	0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	84		51	6.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.25	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	0.82		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.93		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.0077		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.036	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.023		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.37		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B35 (0-7)**

**Lab Sample ID: 500-120935-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.023	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.037	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.038		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7) (Continued)**

**Lab Sample ID: 500-120935-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.019	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.020	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.037	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.014	J	0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.1		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Barium	62		0.50	0.091	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.37		0.20	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	2.3	J	2.5	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12		0.10	0.029	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000		10	3.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.50	0.086	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.6		0.25	0.056	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	10	3.9	mg/Kg	1	☼	6010B	Total/NA
Lead	9.7		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.0	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.50	0.099	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	530		25	4.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		50	6.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.25	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	37		1.0	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	1.2		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.097	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.0093		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	5.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.031		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.047		0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B35 (0-7)D**

**Lab Sample ID: 500-120935-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.0092	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.013	J	0.039	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.042		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0074	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.046		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.038	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.020	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)D (Continued)**

**Lab Sample ID: 500-120935-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.035	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.014	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.021	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.013	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.3		0.46	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.46	0.084	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.18	0.040	mg/Kg	1	☼	6010B	Total/NA
Boron	3.2		2.3	0.32	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.092	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000		9.2	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.46	0.079	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.4		0.23	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	9.2	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.23	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8500		4.6	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	180		0.46	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.46	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	660		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.32	J	0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		46	6.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.23	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		0.92	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	0.92		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.085	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0029	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.24	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	5.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.11	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.035		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B35 (7-14)**

**Lab Sample ID: 500-120935-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.020		0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
Arsenic	1.1		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	57		0.47	0.086	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.33		0.19	0.041	mg/Kg	1	☼	6010B	Total/NA
Boron	1.6	J	2.3	0.33	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16		0.094	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	2200		9.4	3.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.5	B	0.47	0.080	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.4		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Copper	7.6	B	0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	7600	B	9.4	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	7.0		0.23	0.12	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Client Sample ID: 1314V3-01-B35 (7-14) (Continued)

## Lab Sample ID: 500-120935-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1400		4.7	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	88		0.47	0.093	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	440		23	3.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		47	6.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.23	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		0.94	0.30	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	4.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.031	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.31		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.010	J	0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B35 (14-20)

## Lab Sample ID: 500-120935-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.0085	J	0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.1		0.48	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	20		0.48	0.088	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.19	0.042	mg/Kg	1	☼	6010B	Total/NA
Boron	2.2	J	2.4	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.081	J	0.096	0.028	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000		9.6	3.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.48	0.083	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.2		0.24	0.054	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	9.6	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	7.6		0.24	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		4.8	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.48	0.095	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	640		24	3.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.36	J	0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Sodium	75		48	6.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.24	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		0.96	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.93		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	3.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.054		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.028	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.42		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (14-20) (Continued)**

**Lab Sample ID: 500-120935-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.013	J	0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Method Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	SPLP Metals	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	TCLP Mercury	SW846	TAL CHI
7471B	Mercury (CVAA)	SW846	TAL CHI
9045D	pH	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Sample Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-120935-1	1314V3-01-B28 (0-4.5)	Solid	12/02/16 08:30	12/02/16 16:15
500-120935-2	1314V3-01-B27 (0-8)	Solid	12/02/16 09:55	12/02/16 16:15
500-120935-3	1314V3-01-B27 (8-15)	Solid	12/02/16 10:00	12/02/16 16:15
500-120935-4	1314V3-01-B27 (15-22)	Solid	12/02/16 10:05	12/02/16 16:15
500-120935-5	1314V3-01-B35 (0-7)	Solid	12/02/16 10:45	12/02/16 16:15
500-120935-6	1314V3-01-B35 (0-7)D	Solid	12/02/16 10:45	12/02/16 16:15
500-120935-7	1314V3-01-B35 (7-14)	Solid	12/02/16 10:55	12/02/16 16:15
500-120935-8	1314V3-01-B35 (14-20)	Solid	12/02/16 11:00	12/02/16 16:15



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Lab Sample ID: 500-120935-1**

**Date Collected: 12/02/16 08:30**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1
Xylenes, Total	<0.0032		0.0032	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 05:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/02/16 14:50	12/07/16 05:19	1
Dibromofluoromethane	100		75 - 120	12/02/16 14:50	12/07/16 05:19	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/02/16 14:50	12/07/16 05:19	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 14:50	12/07/16 05:19	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Lab Sample ID: 500-120935-1**

**Date Collected: 12/02/16 08:30**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dinitrophenol	<0.77 *		0.77	0.67	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Nitroaniline	<0.38 *		0.38	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Lab Sample ID: 500-120935-1**

**Date Collected: 12/02/16 08:30**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 14:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/10/16 10:34	12/12/16 14:24	1
Phenol-d5	114		36 - 123	12/10/16 10:34	12/12/16 14:24	1
Nitrobenzene-d5	98		33 - 124	12/10/16 10:34	12/12/16 14:24	1
2-Fluorobiphenyl	85		42 - 115	12/10/16 10:34	12/12/16 14:24	1
2,4,6-Tribromophenol	78		25 - 130	12/10/16 10:34	12/12/16 14:24	1
Terphenyl-d14	104		25 - 150	12/10/16 10:34	12/12/16 14:24	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0	F1	1.0	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Arsenic	2.2		0.50	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Barium	51	F1	0.50	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Beryllium	0.44		0.20	0.043	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Boron	2.6	F1	2.5	0.35	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Cadmium	0.14	F1	0.10	0.029	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Calcium	19000	F2	10	3.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Chromium	12	B	0.50	0.086	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Cobalt	6.7		0.25	0.056	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Copper	11	B	0.50	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Iron	10000	B	10	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Lead	9.5		0.25	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Magnesium	11000	F2	5.0	2.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Manganese	180	F2	0.50	0.099	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Nickel	17		0.50	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Potassium	740	F1 F2	25	4.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Selenium	0.52	F1	0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Silver	<0.25	F1	0.25	0.058	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Sodium	500		50	6.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Vanadium	19		0.25	0.073	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1
Zinc	40		1.0	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:10	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 14:37	1
Boron	0.057	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:37	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Lab Sample ID: 500-120935-1**

**Date Collected: 12/02/16 08:30**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0028</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
<b>Cobalt</b>	<b>0.020</b>	<b>J</b>	0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
<b>Manganese</b>	<b>5.4</b>		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
<b>Nickel</b>	<b>0.027</b>		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 14:37	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 14:37	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.9</b>		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:01	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 20:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 20:41	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 10:55	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.019</b>		0.017	0.0090	mg/Kg	☼	12/05/16 16:00	12/06/16 13:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.4</b>		0.2	0.2	SU	-		12/08/16 15:49	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

**Date Collected: 12/02/16 09:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.7**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.036</b>		0.018	0.0080	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 05:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/02/16 14:50	12/07/16 05:44	1
Dibromofluoromethane	97		75 - 120	12/02/16 14:50	12/07/16 05:44	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/02/16 14:50	12/07/16 05:44	1
Toluene-d8 (Surr)	107		75 - 123	12/02/16 14:50	12/07/16 05:44	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

**Date Collected: 12/02/16 09:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.7**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Naphthalene</b>	<b>0.30</b>		0.038	0.0059	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>2-Methylnaphthalene</b>	<b>0.15</b>		0.077	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dinitrophenol	<0.77 *		0.77	0.67	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Acenaphthylene</b>	<b>0.20</b>		0.038	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Acenaphthene</b>	<b>0.14</b>		0.038	0.0069	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Dibenzofuran</b>	<b>0.071 J</b>		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Fluorene</b>	<b>0.12</b>		0.038	0.0054	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Nitroaniline	<0.38 *		0.38	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Phenanthrene</b>	<b>0.50</b>		0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Anthracene</b>	<b>0.46</b>		0.038	0.0064	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Carbazole</b>	<b>0.17 J</b>		0.19	0.095	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Fluoranthene</b>	<b>1.9</b>		0.038	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>Benzo[a]anthracene</b>	<b>2.0</b>		0.038	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
<b>3,3'-Dichlorobenzidine</b>	<b>0.15 J</b>		0.19	0.053	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

Date Collected: 12/02/16 09:55

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 85.7

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.69</b>		0.19	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	97		40 - 130	12/10/16 10:34	12/12/16 17:49	1
Phenol-d5	106		36 - 123	12/10/16 10:34	12/12/16 17:49	1
Nitrobenzene-d5	87		33 - 124	12/10/16 10:34	12/12/16 17:49	1
2-Fluorobiphenyl	84		42 - 115	12/10/16 10:34	12/12/16 17:49	1
2,4,6-Tribromophenol	87		25 - 130	12/10/16 10:34	12/12/16 17:49	1
Terphenyl-d14	164	X	25 - 150	12/10/16 10:34	12/12/16 17:49	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Pyrene</b>	<b>3.3</b>		0.38	0.076	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
<b>Chrysene</b>	<b>4.1</b>		0.38	0.10	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
<b>Benzo[b]fluoranthene</b>	<b>17</b>		0.38	0.082	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
<b>Benzo[k]fluoranthene</b>	<b>5.2</b>		0.38	0.11	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
<b>Benzo[a]pyrene</b>	<b>11</b>		0.38	0.074	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
<b>Indeno[1,2,3-cd]pyrene</b>	<b>5.8</b>		0.38	0.099	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
<b>Dibenz(a,h)anthracene</b>	<b>2.1</b>		0.38	0.074	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10
<b>Benzo[g,h,i]perylene</b>	<b>6.0</b>		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/13/16 11:02	10

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.92		0.92	0.19	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Arsenic</b>	<b>4.7</b>		0.46	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Barium</b>	<b>210</b>		0.46	0.084	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Beryllium</b>	<b>0.71</b>		0.18	0.040	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Boron</b>	<b>9.7</b>		2.3	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Cadmium</b>	<b>1.2</b>		0.092	0.027	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Calcium</b>	<b>21000</b>		9.2	3.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Chromium</b>	<b>26</b>	B	0.46	0.079	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Cobalt</b>	<b>5.5</b>		0.23	0.052	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Copper</b>	<b>51</b>	B	0.46	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Iron</b>	<b>12000</b>	B	9.2	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Lead</b>	<b>1600</b>		0.23	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Magnesium</b>	<b>5700</b>		4.6	1.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Manganese</b>	<b>200</b>		0.46	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Nickel</b>	<b>19</b>		0.46	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Potassium</b>	<b>600</b>		23	3.8	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Selenium</b>	<b>0.83</b>		0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Silver	<0.23		0.23	0.054	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Sodium</b>	<b>480</b>		46	6.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
Thallium	<0.46		0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Vanadium</b>	<b>15</b>		0.23	0.067	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1
<b>Zinc</b>	<b>680</b>		0.92	0.29	mg/Kg	☼	12/07/16 08:45	12/07/16 16:30	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

**Date Collected: 12/02/16 09:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.7**

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.89</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 14:42	1
<b>Boron</b>	<b>0.079</b>	<b>J</b>	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:42	1
<b>Cadmium</b>	<b>0.0086</b>		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 14:42	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
<b>Cobalt</b>	<b>0.027</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 14:42	1
<b>Lead</b>	<b>0.37</b>		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 14:42	1
<b>Manganese</b>	<b>6.2</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
<b>Nickel</b>	<b>0.033</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 14:42	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:42	1
<b>Zinc</b>	<b>0.97</b>	<b>B</b>	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 14:42	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>1.4</b>		0.0075	0.0075	mg/L		12/06/16 09:57	12/08/16 01:08	1
<b>Manganese</b>	<b>0.74</b>		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 01:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 09:57	12/08/16 01:08	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 20:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 20:44	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 11:00	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.19</b>		0.019	0.0098	mg/Kg	☼	12/05/16 16:00	12/06/16 13:47	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU			12/08/16 15:49	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (8-15)**

**Lab Sample ID: 500-120935-3**

**Date Collected: 12/02/16 10:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.0**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.021</b>		0.016	0.0071	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
<b>Ethylbenzene</b>	<b>0.045</b>		0.0016	0.00078	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
<b>Tetrachloroethene</b>	<b>0.0025</b>		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
<b>Toluene</b>	<b>0.0078</b>		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1
<b>Xylenes, Total</b>	<b>0.27</b>		0.0032	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 06:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/02/16 14:50	12/07/16 06:09	1
Dibromofluoromethane	102		75 - 120	12/02/16 14:50	12/07/16 06:09	1
1,2-Dichloroethane-d4 (Surr)	114		69 - 134	12/02/16 14:50	12/07/16 06:09	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 14:50	12/07/16 06:09	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.082	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (8-15)**

**Lab Sample ID: 500-120935-3**

**Date Collected: 12/02/16 10:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachlorocyclopentadiene	<0.74 *		0.74	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dinitrophenol	<0.74 *		0.74	0.65	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
<b>Acenaphthylene</b>	<b>0.91</b>		0.037	0.0048	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Nitroaniline	<0.37 *		0.37	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/10/16 10:34	12/12/16 18:15	1
Phenol-d5	107		36 - 123	12/10/16 10:34	12/12/16 18:15	1
Nitrobenzene-d5	90		33 - 124	12/10/16 10:34	12/12/16 18:15	1
2-Fluorobiphenyl	83		42 - 115	12/10/16 10:34	12/12/16 18:15	1
2,4,6-Tribromophenol	92		25 - 130	12/10/16 10:34	12/12/16 18:15	1
Terphenyl-d14	163	X	25 - 150	12/10/16 10:34	12/12/16 18:15	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	15		0.73	0.11	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
2-Methylnaphthalene	19		1.5	0.14	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Acenaphthene	33		0.73	0.13	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Dibenzofuran	24		3.7	0.86	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Fluorene	32		0.73	0.10	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Anthracene	22		0.73	0.12	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Carbazole	4.8		3.7	1.8	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Pyrene	45		0.73	0.15	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[a]anthracene	18		0.73	0.099	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Chrysene	18		0.73	0.20	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[b]fluoranthene	16		0.73	0.16	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[k]fluoranthene	5.9		0.73	0.22	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[a]pyrene	10		0.73	0.14	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Indeno[1,2,3-cd]pyrene	2.5		0.73	0.19	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Dibenz(a,h)anthracene	0.86		0.73	0.14	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20
Benzo[g,h,i]perylene	1.9		0.73	0.24	mg/Kg	☼	12/10/16 10:34	12/13/16 11:27	20

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	98		3.7	0.51	mg/Kg	☼	12/10/16 10:34	12/13/16 10:36	100
Fluoranthene	74		3.7	0.68	mg/Kg	☼	12/10/16 10:34	12/13/16 10:36	100

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Arsenic	5.1		0.56	0.26	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Barium	56		0.56	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Beryllium	0.43		0.22	0.048	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Boron	4.0		2.8	0.39	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Cadmium	0.37		0.11	0.032	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Calcium	30000		11	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Chromium	8.4	B	0.56	0.096	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Cobalt	6.9		0.28	0.063	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Copper	17	B	0.56	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Iron	12000	B	11	4.3	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Lead	49		0.28	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Magnesium	12000		5.6	2.3	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Manganese	350		0.56	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Nickel	14		0.56	0.15	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Potassium	620		28	4.5	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Selenium	0.68		0.56	0.28	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Sodium	410		56	7.4	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Vanadium	14		0.28	0.081	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1
Zinc	100		1.1	0.35	mg/Kg	☼	12/07/16 08:45	12/07/16 16:34	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.87		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 14:47	1
Boron	0.064	J	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 14:47	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 14:47	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (8-15)**

**Lab Sample ID: 500-120935-3**

**Date Collected: 12/02/16 10:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.0**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cobalt</b>	<b>0.028</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 14:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 14:47	1
<b>Manganese</b>	<b>5.3</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
<b>Nickel</b>	<b>0.040</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 14:47	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 14:47	1
<b>Zinc</b>	<b>0.058</b>	<b>J B</b>	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 14:47	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.74</b>		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 01:15	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 20:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 20:47	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 11:01	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	<b>J</b>	0.018	0.0095	mg/Kg	☼	12/05/16 16:00	12/06/16 13:48	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.9</b>		0.2	0.2	SU			12/08/16 15:49	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (15-22)**

**Lab Sample ID: 500-120935-4**

**Date Collected: 12/02/16 10:05**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Bromodichloromethane	<0.0016		0.0016	0.00034	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1-Dichloroethane	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,2-Dichloropropane	<0.0016		0.0016	0.00043	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Toluene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00071	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 06:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/02/16 14:50	12/07/16 06:34	1
Dibromofluoromethane	103		75 - 120	12/02/16 14:50	12/07/16 06:34	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/02/16 14:50	12/07/16 06:34	1
Toluene-d8 (Surr)	102		75 - 123	12/02/16 14:50	12/07/16 06:34	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (15-22)**

**Lab Sample ID: 500-120935-4**

**Date Collected: 12/02/16 10:05**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Naphthalene</b>	<b>0.017</b>	<b>J</b>	0.036	0.0056	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachlorocyclopentadiene	<0.74	*	0.74	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>2-Methylnaphthalene</b>	<b>0.017</b>	<b>J</b>	0.074	0.0067	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dinitrophenol	<0.74	*	0.74	0.64	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Acenaphthene</b>	<b>0.045</b>		0.036	0.0066	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Fluorene</b>	<b>0.036</b>		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Nitroaniline	<0.36	*	0.36	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Phenanthrene</b>	<b>0.089</b>		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Anthracene</b>	<b>0.021</b>	<b>J</b>	0.036	0.0061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Fluoranthene</b>	<b>0.11</b>		0.036	0.0068	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Pyrene</b>	<b>0.088</b>		0.036	0.0073	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Benzo[a]anthracene</b>	<b>0.061</b>		0.036	0.0049	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (15-22)**

**Lab Sample ID: 500-120935-4**

**Date Collected: 12/02/16 10:05**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.063</b>		0.036	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Benzo[b]fluoranthene</b>	<b>0.091</b>		0.036	0.0079	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Benzo[k]fluoranthene</b>	<b>0.034</b>	<b>J</b>	0.036	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Benzo[a]pyrene</b>	<b>0.058</b>		0.036	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.021</b>	<b>J</b>	0.036	0.0095	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0093</b>	<b>J</b>	0.036	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
<b>Benzo[g,h,i]perylene</b>	<b>0.015</b>	<b>J</b>	0.036	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		40 - 130	12/10/16 10:34	12/12/16 14:50	1
Phenol-d5	107		36 - 123	12/10/16 10:34	12/12/16 14:50	1
Nitrobenzene-d5	92		33 - 124	12/10/16 10:34	12/12/16 14:50	1
2-Fluorobiphenyl	82		42 - 115	12/10/16 10:34	12/12/16 14:50	1
2,4,6-Tribromophenol	78		25 - 130	12/10/16 10:34	12/12/16 14:50	1
Terphenyl-d14	96		25 - 150	12/10/16 10:34	12/12/16 14:50	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Arsenic</b>	<b>3.6</b>		0.51	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Barium</b>	<b>46</b>		0.51	0.093	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Beryllium</b>	<b>0.42</b>		0.20	0.044	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Boron</b>	<b>2.0</b>	<b>J</b>	2.5	0.36	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Cadmium</b>	<b>0.13</b>		0.10	0.029	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Calcium</b>	<b>26000</b>		10	3.3	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.51	0.087	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Cobalt</b>	<b>8.1</b>		0.25	0.057	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Copper</b>	<b>12</b>	<b>B</b>	0.51	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Iron</b>	<b>12000</b>	<b>B</b>	10	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Lead</b>	<b>13</b>		0.25	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Magnesium</b>	<b>11000</b>		5.1	2.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Manganese</b>	<b>280</b>		0.51	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Nickel</b>	<b>20</b>		0.51	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Potassium</b>	<b>630</b>		25	4.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Selenium</b>	<b>0.31</b>	<b>J</b>	0.51	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Silver	<0.25		0.25	0.060	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Sodium</b>	<b>84</b>		51	6.7	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Vanadium</b>	<b>15</b>		0.25	0.074	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1
<b>Zinc</b>	<b>39</b>		1.0	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:38	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.82</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:15	1
<b>Boron</b>	<b>0.059</b>	<b>J</b>	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:15	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (15-22)**

**Lab Sample ID: 500-120935-4**

**Date Collected: 12/02/16 10:05**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0021	J	0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 15:15	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:15	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:15	1
Iron	0.93		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 15:15	1
Lead	0.0077		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 15:15	1
Manganese	3.1		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:15	1
Nickel	0.038		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:15	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 15:15	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:15	1
Zinc	0.036	J B	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 15:15	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.023		0.0075	0.0075	mg/L		12/06/16 09:57	12/08/16 01:22	1
Manganese	0.37		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 01:22	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 20:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 20:51	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 11:03	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.017	0.0091	mg/Kg	☼	12/05/16 16:00	12/06/16 13:50	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			12/08/16 15:49	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)**

**Lab Sample ID: 500-120935-5**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 82.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 06:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 120	12/02/16 14:50	12/07/16 06:59	1
Dibromofluoromethane	99		75 - 120	12/02/16 14:50	12/07/16 06:59	1
1,2-Dichloroethane-d4 (Surr)	102		69 - 134	12/02/16 14:50	12/07/16 06:59	1
Toluene-d8 (Surr)	103		75 - 123	12/02/16 14:50	12/07/16 06:59	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)**

**Lab Sample ID: 500-120935-5**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 82.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dinitrophenol	<0.77 *		0.77	0.67	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Nitroaniline	<0.38 *		0.38	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Phenanthrene</b>	<b>0.023</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Fluoranthene</b>	<b>0.037</b>	<b>J</b>	0.038	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Pyrene</b>	<b>0.038</b>		0.038	0.0075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Benzo[a]anthracene</b>	<b>0.019</b>	<b>J</b>	0.038	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)**

**Lab Sample ID: 500-120935-5**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 82.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.020</b>	<b>J</b>	0.038	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Benzo[b]fluoranthene</b>	<b>0.037</b>	<b>J</b>	0.038	0.0082	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Benzo[k]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.038	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Benzo[a]pyrene</b>	<b>0.024</b>	<b>J</b>	0.038	0.0074	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.014</b>	<b>J</b>	0.038	0.0098	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/10/16 10:34	12/12/16 15:15	1
Phenol-d5	108		36 - 123	12/10/16 10:34	12/12/16 15:15	1
Nitrobenzene-d5	91		33 - 124	12/10/16 10:34	12/12/16 15:15	1
2-Fluorobiphenyl	83		42 - 115	12/10/16 10:34	12/12/16 15:15	1
2,4,6-Tribromophenol	89		25 - 130	12/10/16 10:34	12/12/16 15:15	1
Terphenyl-d14	109		25 - 150	12/10/16 10:34	12/12/16 15:15	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Arsenic</b>	<b>4.1</b>		0.50	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Barium</b>	<b>62</b>		0.50	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Beryllium</b>	<b>0.37</b>		0.20	0.043	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Boron</b>	<b>2.3</b>	<b>J</b>	2.5	0.35	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Cadmium</b>	<b>0.12</b>		0.10	0.029	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Calcium</b>	<b>19000</b>		10	3.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Chromium</b>	<b>12</b>	<b>B</b>	0.50	0.086	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Cobalt</b>	<b>7.6</b>		0.25	0.056	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Copper</b>	<b>11</b>	<b>B</b>	0.50	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Iron</b>	<b>11000</b>	<b>B</b>	10	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Lead</b>	<b>9.7</b>		0.25	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Magnesium</b>	<b>11000</b>		5.0	2.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Manganese</b>	<b>300</b>		0.50	0.099	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Nickel</b>	<b>16</b>		0.50	0.14	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Potassium</b>	<b>530</b>		25	4.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Selenium</b>	<b>0.30</b>	<b>J</b>	0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Silver	<0.25		0.25	0.058	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Sodium</b>	<b>190</b>		50	6.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Vanadium</b>	<b>21</b>		0.25	0.073	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1
<b>Zinc</b>	<b>37</b>		1.0	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:42	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>1.2</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:20	1
<b>Boron</b>	<b>0.097</b>	<b>J</b>	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:20	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)**

**Lab Sample ID: 500-120935-5**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 82.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0027</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
<b>Cobalt</b>	<b>0.048</b>		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
<b>Lead</b>	<b>0.0093</b>		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
<b>Manganese</b>	<b>5.9</b>		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
<b>Nickel</b>	<b>0.046</b>		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:20	1
<b>Zinc</b>	<b>0.15</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:20	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.031</b>		0.0075	0.0075	mg/L	-	12/06/16 09:57	12/08/16 01:29	1
<b>Manganese</b>	<b>0.21</b>		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:29	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 20:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 20:54	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 11:04	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.047</b>		0.020	0.010	mg/Kg	☼	12/05/16 16:00	12/06/16 13:51	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU	-		12/08/16 15:49	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)D**

**Lab Sample ID: 500-120935-6**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 84.1**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120	12/02/16 14:50	12/07/16 07:24	1
Dibromofluoromethane	98		75 - 120	12/02/16 14:50	12/07/16 07:24	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/02/16 14:50	12/07/16 07:24	1
Toluene-d8 (Surr)	104		75 - 123	12/02/16 14:50	12/07/16 07:24	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)D**

**Lab Sample ID: 500-120935-6**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 84.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachlorocyclopentadiene	<0.79	*	0.79	0.22	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>2-Methylnaphthalene</b>	<b>0.0092</b>	<b>J</b>	0.079	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Acenaphthene</b>	<b>0.013</b>	<b>J</b>	0.039	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Fluorene</b>	<b>0.013</b>	<b>J</b>	0.039	0.0055	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Nitroaniline	<0.39	*	0.39	0.16	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Phenanthrene</b>	<b>0.042</b>		0.039	0.0054	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Anthracene</b>	<b>0.0074</b>	<b>J</b>	0.039	0.0065	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Fluoranthene</b>	<b>0.046</b>		0.039	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Pyrene</b>	<b>0.038</b>	<b>J</b>	0.039	0.0077	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Benzo[a]anthracene</b>	<b>0.020</b>	<b>J</b>	0.039	0.0052	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)D**

**Lab Sample ID: 500-120935-6**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 84.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.022</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Benzo[b]fluoranthene</b>	<b>0.035</b>	<b>J</b>	0.039	0.0084	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Benzo[k]fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Benzo[a]pyrene</b>	<b>0.021</b>	<b>J</b>	0.039	0.0075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.013</b>	<b>J</b>	0.039	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/10/16 10:34	12/12/16 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	98		40 - 130	12/10/16 10:34	12/12/16 15:41	1
Phenol-d5	106		36 - 123	12/10/16 10:34	12/12/16 15:41	1
Nitrobenzene-d5	93		33 - 124	12/10/16 10:34	12/12/16 15:41	1
2-Fluorobiphenyl	80		42 - 115	12/10/16 10:34	12/12/16 15:41	1
2,4,6-Tribromophenol	85		25 - 130	12/10/16 10:34	12/12/16 15:41	1
Terphenyl-d14	102		25 - 150	12/10/16 10:34	12/12/16 15:41	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.92		0.92	0.19	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Arsenic</b>	<b>4.3</b>		0.46	0.21	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Barium</b>	<b>61</b>		0.46	0.084	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Beryllium</b>	<b>0.45</b>		0.18	0.040	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Boron</b>	<b>3.2</b>		2.3	0.32	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Cadmium</b>	<b>0.17</b>		0.092	0.027	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Calcium</b>	<b>15000</b>		9.2	3.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Chromium</b>	<b>12</b>	<b>B</b>	0.46	0.079	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Cobalt</b>	<b>8.4</b>		0.23	0.052	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Copper</b>	<b>11</b>	<b>B</b>	0.46	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Iron</b>	<b>10000</b>	<b>B</b>	9.2	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Lead</b>	<b>17</b>		0.23	0.11	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Magnesium</b>	<b>8500</b>		4.6	1.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Manganese</b>	<b>180</b>		0.46	0.091	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Nickel</b>	<b>17</b>		0.46	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Potassium</b>	<b>660</b>		23	3.8	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Selenium</b>	<b>0.32</b>	<b>J</b>	0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Silver	<0.23		0.23	0.054	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Sodium</b>	<b>160</b>		46	6.1	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
Thallium	<0.46		0.46	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Vanadium</b>	<b>19</b>		0.23	0.067	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1
<b>Zinc</b>	<b>64</b>		0.92	0.29	mg/Kg	☼	12/07/16 08:45	12/07/16 16:45	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.92</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:25	1
<b>Boron</b>	<b>0.085</b>	<b>J</b>	0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:25	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)D**

**Lab Sample ID: 500-120935-6**

Date Collected: 12/02/16 10:45

Matrix: Solid

Date Received: 12/02/16 16:15

Percent Solids: 84.1

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0029	J	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Cobalt	0.035		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Iron	0.24	J	0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Manganese	5.5		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Nickel	0.040		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:25	1
Zinc	0.11	J B	0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:25	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.36		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:35	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 20:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 20:58	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 11:06	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.018	0.0096	mg/Kg	☼	12/05/16 16:00	12/06/16 13:53	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU	-		12/08/16 15:49	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (7-14)**

**Lab Sample ID: 500-120935-7**

**Date Collected: 12/02/16 10:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.6**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.020</b>		0.017	0.0075	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 07:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/02/16 14:50	12/07/16 07:48	1
Dibromofluoromethane	100		75 - 120	12/02/16 14:50	12/07/16 07:48	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/02/16 14:50	12/07/16 07:48	1
Toluene-d8 (Surr)	101		75 - 123	12/02/16 14:50	12/07/16 07:48	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (7-14)**

**Lab Sample ID: 500-120935-7**

**Date Collected: 12/02/16 10:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachlorocyclopentadiene	<0.75 *		0.75	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dinitrophenol	<0.75 *		0.75	0.65	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Nitroaniline	<0.37 *		0.37	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (7-14)**

**Lab Sample ID: 500-120935-7**

**Date Collected: 12/02/16 10:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		40 - 130	12/10/16 10:34	12/12/16 16:07	1
Phenol-d5	114		36 - 123	12/10/16 10:34	12/12/16 16:07	1
Nitrobenzene-d5	100		33 - 124	12/10/16 10:34	12/12/16 16:07	1
2-Fluorobiphenyl	86		42 - 115	12/10/16 10:34	12/12/16 16:07	1
2,4,6-Tribromophenol	86		25 - 130	12/10/16 10:34	12/12/16 16:07	1
Terphenyl-d14	102		25 - 150	12/10/16 10:34	12/12/16 16:07	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.94		0.94	0.19	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Arsenic</b>	<b>1.1</b>		0.47	0.22	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Barium</b>	<b>57</b>		0.47	0.086	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Beryllium</b>	<b>0.33</b>		0.19	0.041	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Boron</b>	<b>1.6 J</b>		2.3	0.33	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Cadmium</b>	<b>0.16</b>		0.094	0.027	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Calcium</b>	<b>2200</b>		9.4	3.0	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Chromium</b>	<b>8.5 B</b>		0.47	0.080	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Cobalt</b>	<b>4.4</b>		0.23	0.053	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Copper</b>	<b>7.6 B</b>		0.47	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Iron</b>	<b>7600 B</b>		9.4	3.6	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Lead</b>	<b>7.0</b>		0.23	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Magnesium</b>	<b>1400</b>		4.7	1.9	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Manganese</b>	<b>88</b>		0.47	0.093	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Nickel</b>	<b>11</b>		0.47	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Potassium</b>	<b>440</b>		23	3.8	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Selenium</b>	<b>0.38 J</b>		0.47	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Silver	<0.23		0.23	0.055	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Sodium</b>	<b>120</b>		47	6.2	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
Thallium	<0.47		0.47	0.23	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Vanadium</b>	<b>13</b>		0.23	0.068	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1
<b>Zinc</b>	<b>34</b>		0.94	0.30	mg/Kg	☼	12/07/16 08:45	12/07/16 16:56	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.77</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:29	1
<b>Boron</b>	<b>0.055 J</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:29	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (7-14)**

**Lab Sample ID: 500-120935-7**

**Date Collected: 12/02/16 10:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0026</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
<b>Cobalt</b>	<b>0.020</b>	<b>J</b>	0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Iron	<0.40		0.40	0.20	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
<b>Manganese</b>	<b>4.7</b>		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
<b>Nickel</b>	<b>0.021</b>	<b>J</b>	0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
Silver	<0.025		0.025	0.010	mg/L	-	12/06/16 14:18	12/07/16 15:29	1
<b>Zinc</b>	<b>0.031</b>	<b>J B</b>	0.50	0.020	mg/L	-	12/06/16 14:18	12/07/16 15:29	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.31</b>		0.025	0.010	mg/L	-	12/06/16 09:57	12/08/16 01:42	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/06/16 14:18	12/07/16 21:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/06/16 14:18	12/07/16 21:01	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/16 13:45	12/07/16 11:10	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.010</b>	<b>J</b>	0.017	0.0091	mg/Kg	☼	12/05/16 16:00	12/06/16 13:54	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.2</b>		0.2	0.2	SU	-		12/08/16 15:49	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (14-20)**

**Lab Sample ID: 500-120935-8**

**Date Collected: 12/02/16 11:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/02/16 14:50	12/07/16 08:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 120	12/02/16 14:50	12/07/16 08:13	1
Dibromofluoromethane	101		75 - 120	12/02/16 14:50	12/07/16 08:13	1
1,2-Dichloroethane-d4 (Surr)	107		69 - 134	12/02/16 14:50	12/07/16 08:13	1
Toluene-d8 (Surr)	104		75 - 123	12/02/16 14:50	12/07/16 08:13	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (14-20)**

**Lab Sample ID: 500-120935-8**

**Date Collected: 12/02/16 11:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachlorocyclopentadiene	<0.73	*	0.73	0.21	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Nitroaniline	<0.36	*	0.36	0.15	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
<b>Pyrene</b>	<b>0.0085</b>	<b>J</b>	0.036	0.0072	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (14-20)**

**Lab Sample ID: 500-120935-8**

**Date Collected: 12/02/16 11:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/10/16 10:34	12/12/16 16:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	103		40 - 130				12/10/16 10:34	12/12/16 16:32	1
Phenol-d5	111		36 - 123				12/10/16 10:34	12/12/16 16:32	1
Nitrobenzene-d5	97		33 - 124				12/10/16 10:34	12/12/16 16:32	1
2-Fluorobiphenyl	83		42 - 115				12/10/16 10:34	12/12/16 16:32	1
2,4,6-Tribromophenol	84		25 - 130				12/10/16 10:34	12/12/16 16:32	1
Terphenyl-d14	101		25 - 150				12/10/16 10:34	12/12/16 16:32	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.96		0.96	0.20	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Arsenic</b>	<b>3.1</b>		0.48	0.22	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Barium</b>	<b>20</b>		0.48	0.088	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Beryllium</b>	<b>0.42</b>		0.19	0.042	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Boron</b>	<b>2.2 J</b>		2.4	0.34	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Cadmium</b>	<b>0.081 J</b>		0.096	0.028	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Calcium</b>	<b>23000</b>		9.6	3.1	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Chromium</b>	<b>10 B</b>		0.48	0.083	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Cobalt</b>	<b>6.2</b>		0.24	0.054	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Copper</b>	<b>11 B</b>		0.48	0.10	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Iron</b>	<b>11000 B</b>		9.6	3.7	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Lead</b>	<b>7.6</b>		0.24	0.12	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Magnesium</b>	<b>11000</b>		4.8	2.0	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Manganese</b>	<b>230</b>		0.48	0.095	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Nickel</b>	<b>13</b>		0.48	0.13	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Potassium</b>	<b>640</b>		24	3.9	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Selenium</b>	<b>0.36 J</b>		0.48	0.24	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Silver	<0.24		0.24	0.056	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Sodium</b>	<b>75</b>		48	6.4	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
Thallium	<0.48		0.48	0.24	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Vanadium</b>	<b>15</b>		0.24	0.070	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1
<b>Zinc</b>	<b>31</b>		0.96	0.31	mg/Kg	☼	12/07/16 08:45	12/07/16 17:00	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.51</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 15:34	1
<b>Boron</b>	<b>0.059 J</b>		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 15:34	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (14-20)**

**Lab Sample ID: 500-120935-8**

**Date Collected: 12/02/16 11:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 15:34	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
<b>Cobalt</b>	<b>0.023</b>	<b>J</b>	0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
<b>Iron</b>	<b>0.93</b>		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 15:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 15:34	1
<b>Manganese</b>	<b>3.6</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
<b>Nickel</b>	<b>0.054</b>		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 15:34	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 15:34	1
<b>Zinc</b>	<b>0.028</b>	<b>J B</b>	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 15:34	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.42</b>		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 02:05	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 21:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 21:04	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 11:12	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.013</b>	<b>J</b>	0.018	0.0093	mg/Kg	☼	12/05/16 16:00	12/06/16 13:56	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU			12/08/16 15:49	1

# Definitions/Glossary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## GC/MS VOA

### Prep Batch: 363519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	5035	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	5035	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	5035	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	5035	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	5035	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	5035	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	5035	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	5035	

### Analysis Batch: 363772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	8260B	363519
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	8260B	363519
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	8260B	363519
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	8260B	363519
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	8260B	363519
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	8260B	363519
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	8260B	363519
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	8260B	363519
MB 500-363772/4	Method Blank	Total/NA	Solid	8260B	
LCS 500-363772/3	Lab Control Sample	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 364515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3541	
500-120935-2 - DL	1314V3-01-B27 (0-8)	Total/NA	Solid	3541	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	3541	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	3541	
500-120935-3 - DL	1314V3-01-B27 (8-15)	Total/NA	Solid	3541	
500-120935-3 - DL2	1314V3-01-B27 (8-15)	Total/NA	Solid	3541	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	3541	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	3541	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	3541	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	3541	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	3541	
MB 500-364515/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-364515/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 364605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	8270D	364515
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	8270D	364515
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	8270D	364515
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	8270D	364515
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	8270D	364515
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	8270D	364515
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	8270D	364515
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	8270D	364515

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 364605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-364515/1-A	Method Blank	Total/NA	Solid	8270D	364515
LCS 500-364515/2-A	Lab Control Sample	Total/NA	Solid	8270D	364515

### Analysis Batch: 364791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-2 - DL	1314V3-01-B27 (0-8)	Total/NA	Solid	8270D	364515
500-120935-3 - DL2	1314V3-01-B27 (8-15)	Total/NA	Solid	8270D	364515
500-120935-3 - DL	1314V3-01-B27 (8-15)	Total/NA	Solid	8270D	364515

## Metals

### Prep Batch: 363688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	7471B	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	7471B	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	7471B	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	7471B	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	7471B	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	7471B	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	7471B	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	7471B	
MB 500-363688/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-363688/13-A	Lab Control Sample	Total/NA	Solid	7471B	

### Leach Batch: 363725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	SPLP East	Solid	1312	
500-120935-2	1314V3-01-B27 (0-8)	SPLP East	Solid	1312	
500-120935-3	1314V3-01-B27 (8-15)	SPLP East	Solid	1312	
500-120935-4	1314V3-01-B27 (15-22)	SPLP East	Solid	1312	
500-120935-5	1314V3-01-B35 (0-7)	SPLP East	Solid	1312	
500-120935-6	1314V3-01-B35 (0-7)D	SPLP East	Solid	1312	
500-120935-7	1314V3-01-B35 (7-14)	SPLP East	Solid	1312	
500-120935-8	1314V3-01-B35 (14-20)	SPLP East	Solid	1312	
LB 500-363725/1-B	Method Blank	SPLP East	Solid	1312	
500-120935-8 MS	1314V3-01-B35 (14-20)	SPLP East	Solid	1312	
500-120935-8 DU	1314V3-01-B35 (14-20)	SPLP East	Solid	1312	

### Leach Batch: 363730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	1311	
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	1311	
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	1311	
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	1311	
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	1311	
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	1311	
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	1311	
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	1311	
LB 500-363730/1-B	Method Blank	TCLP	Solid	1311	
LB 500-363730/1-C	Method Blank	TCLP	Solid	1311	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Metals (Continued)

### Leach Batch: 363730 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1 MS	1314V3-01-B28 (0-4.5)	TCLP	Solid	1311	
500-120935-1 DU	1314V3-01-B28 (0-4.5)	TCLP	Solid	1311	

### Prep Batch: 363771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	SPLP East	Solid	3010A	363725
500-120935-2	1314V3-01-B27 (0-8)	SPLP East	Solid	3010A	363725
500-120935-3	1314V3-01-B27 (8-15)	SPLP East	Solid	3010A	363725
500-120935-4	1314V3-01-B27 (15-22)	SPLP East	Solid	3010A	363725
500-120935-5	1314V3-01-B35 (0-7)	SPLP East	Solid	3010A	363725
500-120935-6	1314V3-01-B35 (0-7)D	SPLP East	Solid	3010A	363725
500-120935-7	1314V3-01-B35 (7-14)	SPLP East	Solid	3010A	363725
500-120935-8	1314V3-01-B35 (14-20)	SPLP East	Solid	3010A	363725
LB 500-363725/1-B	Method Blank	SPLP East	Solid	3010A	363725
LCS 500-363771/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-120935-8 MS	1314V3-01-B35 (14-20)	SPLP East	Solid	3010A	363725
500-120935-8 DU	1314V3-01-B35 (14-20)	SPLP East	Solid	3010A	363725

### Prep Batch: 363808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363730
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	7470A	363730
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	7470A	363730
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	7470A	363730
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	7470A	363730
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	7470A	363730
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	7470A	363730
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	7470A	363730
LB 500-363730/1-B	Method Blank	TCLP	Solid	7470A	363730
MB 500-363808/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-363808/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-120935-1 MS	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363730
500-120935-1 DU	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363730

### Prep Batch: 363823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	3010A	363730
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	3010A	363730
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	3010A	363730
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	3010A	363730
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	3010A	363730
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	3010A	363730
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	3010A	363730
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	3010A	363730
LB 500-363730/1-C	Method Blank	TCLP	Solid	3010A	363730
LCS 500-363823/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Analysis Batch: 363848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	7471B	363688
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	7471B	363688

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Metals (Continued)

### Analysis Batch: 363848 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	7471B	363688
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	7471B	363688
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	7471B	363688
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	7471B	363688
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	7471B	363688
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	7471B	363688
MB 500-363688/12-A	Method Blank	Total/NA	Solid	7471B	363688
LCS 500-363688/13-A	Lab Control Sample	Total/NA	Solid	7471B	363688

### Prep Batch: 363943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	3050B	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	3050B	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	3050B	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	3050B	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	3050B	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	3050B	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	3050B	
MB 500-363943/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-363943/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-120935-1 MS	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	
500-120935-1 MSD	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	
500-120935-1 DU	1314V3-01-B28 (0-4.5)	Total/NA	Solid	3050B	

### Analysis Batch: 363991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363808
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	7470A	363808
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	7470A	363808
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	7470A	363808
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	7470A	363808
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	7470A	363808
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	7470A	363808
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	7470A	363808
LB 500-363730/1-B	Method Blank	TCLP	Solid	7470A	363808
MB 500-363808/12-A	Method Blank	Total/NA	Solid	7470A	363808
LCS 500-363808/13-A	Lab Control Sample	Total/NA	Solid	7470A	363808
500-120935-1 MS	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363808
500-120935-1 DU	1314V3-01-B28 (0-4.5)	TCLP	Solid	7470A	363808

### Analysis Batch: 364125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	6010B	363823
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	6010B	363823
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	6010B	363823
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	6010B	363823
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	6010B	363823
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	6010B	363823
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	6010B	363823
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	6010B	363823

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Metals (Continued)

### Analysis Batch: 364125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-363730/1-C	Method Blank	TCLP	Solid	6010B	363823
LCS 500-363823/2-A	Lab Control Sample	Total/NA	Solid	6010B	363823

### Analysis Batch: 364126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	6010B	363943
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	6010B	363943
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	6010B	363943
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	6010B	363943
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	6010B	363943
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	6010B	363943
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	6010B	363943
MB 500-363943/1-A	Method Blank	Total/NA	Solid	6010B	363943
LCS 500-363943/2-A	Lab Control Sample	Total/NA	Solid	6010B	363943
500-120935-1 MS	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943
500-120935-1 MSD	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943
500-120935-1 DU	1314V3-01-B28 (0-4.5)	Total/NA	Solid	6010B	363943

### Analysis Batch: 364150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	SPLP East	Solid	6010B	363771
500-120935-2	1314V3-01-B27 (0-8)	SPLP East	Solid	6010B	363771
500-120935-3	1314V3-01-B27 (8-15)	SPLP East	Solid	6010B	363771
500-120935-4	1314V3-01-B27 (15-22)	SPLP East	Solid	6010B	363771
500-120935-5	1314V3-01-B35 (0-7)	SPLP East	Solid	6010B	363771
500-120935-6	1314V3-01-B35 (0-7)D	SPLP East	Solid	6010B	363771
500-120935-7	1314V3-01-B35 (7-14)	SPLP East	Solid	6010B	363771
500-120935-8	1314V3-01-B35 (14-20)	SPLP East	Solid	6010B	363771
LB 500-363725/1-B	Method Blank	SPLP East	Solid	6010B	363771
LCS 500-363771/2-A	Lab Control Sample	Total/NA	Solid	6010B	363771
500-120935-8 MS	1314V3-01-B35 (14-20)	SPLP East	Solid	6010B	363771
500-120935-8 DU	1314V3-01-B35 (14-20)	SPLP East	Solid	6010B	363771

### Analysis Batch: 364154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	TCLP	Solid	6020A	363823
500-120935-2	1314V3-01-B27 (0-8)	TCLP	Solid	6020A	363823
500-120935-3	1314V3-01-B27 (8-15)	TCLP	Solid	6020A	363823
500-120935-4	1314V3-01-B27 (15-22)	TCLP	Solid	6020A	363823
500-120935-5	1314V3-01-B35 (0-7)	TCLP	Solid	6020A	363823
500-120935-6	1314V3-01-B35 (0-7)D	TCLP	Solid	6020A	363823
500-120935-7	1314V3-01-B35 (7-14)	TCLP	Solid	6020A	363823
500-120935-8	1314V3-01-B35 (14-20)	TCLP	Solid	6020A	363823
LB 500-363730/1-C	Method Blank	TCLP	Solid	6020A	363823
LCS 500-363823/2-A	Lab Control Sample	Total/NA	Solid	6020A	363823

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## General Chemistry

### Analysis Batch: 363604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	Moisture	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	Moisture	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	Moisture	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	Moisture	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	Moisture	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	Moisture	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	Moisture	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	Moisture	
500-120935-1 DU	1314V3-01-B28 (0-4.5)	Total/NA	Solid	Moisture	

### Analysis Batch: 364231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-120935-1	1314V3-01-B28 (0-4.5)	Total/NA	Solid	9045D	
500-120935-2	1314V3-01-B27 (0-8)	Total/NA	Solid	9045D	
500-120935-3	1314V3-01-B27 (8-15)	Total/NA	Solid	9045D	
500-120935-4	1314V3-01-B27 (15-22)	Total/NA	Solid	9045D	
500-120935-5	1314V3-01-B35 (0-7)	Total/NA	Solid	9045D	
500-120935-6	1314V3-01-B35 (0-7)D	Total/NA	Solid	9045D	
500-120935-7	1314V3-01-B35 (7-14)	Total/NA	Solid	9045D	
500-120935-8	1314V3-01-B35 (14-20)	Total/NA	Solid	9045D	

# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	12DCE	TOL
		(70-120)	(75-120)	(69-134)	(75-123)
500-120935-1	1314V3-01-B28 (0-4.5)	109	100	106	103
500-120935-2	1314V3-01-B27 (0-8)	109	97	103	107
500-120935-3	1314V3-01-B27 (8-15)	107	102	114	103
500-120935-4	1314V3-01-B27 (15-22)	104	103	104	102
500-120935-5	1314V3-01-B35 (0-7)	103	99	102	103
500-120935-6	1314V3-01-B35 (0-7)D	104	98	103	104
500-120935-7	1314V3-01-B35 (7-14)	105	100	107	101
500-120935-8	1314V3-01-B35 (14-20)	107	101	107	104
LCS 500-363772/3	Lab Control Sample	102	96	98	104
MB 500-363772/4	Method Blank	104	96	95	104

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane  
12DCE = 1,2-Dichloroethane-d4 (Surr)  
TOL = Toluene-d8 (Surr)

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPH
		(40-130)	(36-123)	(33-124)	(42-115)	(25-130)	(25-150)
500-120935-1	1314V3-01-B28 (0-4.5)	106	114	98	85	78	104
500-120935-2	1314V3-01-B27 (0-8)	97	106	87	84	87	164 X
500-120935-2 - DL	1314V3-01-B27 (0-8)	116	123	119	108	82	128
500-120935-3	1314V3-01-B27 (8-15)	99	107	90	83	92	163 X
500-120935-3 - DL	1314V3-01-B27 (8-15)	117	117	122	114	84	132
500-120935-3 - DL2	1314V3-01-B27 (8-15)	0 D	0 D	0 D	0 D	0 D	0 D
500-120935-4	1314V3-01-B27 (15-22)	100	107	92	82	78	96
500-120935-5	1314V3-01-B35 (0-7)	99	108	91	83	89	109
500-120935-6	1314V3-01-B35 (0-7)D	98	106	93	80	85	102
500-120935-7	1314V3-01-B35 (7-14)	106	114	100	86	86	102
500-120935-8	1314V3-01-B35 (14-20)	103	111	97	83	84	101
LCS 500-364515/2-A	Lab Control Sample	104	108	100	84	85	98
MB 500-364515/1-A	Method Blank	110	119	104	91	69	106

#### Surrogate Legend

2FP = 2-Fluorophenol  
PHL = Phenol-d5  
NBZ = Nitrobenzene-d5  
FBP = 2-Fluorobiphenyl  
TBP = 2,4,6-Tribromophenol  
TPH = Terphenyl-d14

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-363772/4**  
**Matrix: Solid**  
**Analysis Batch: 363772**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/16 22:39	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 22:39	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/16 22:39	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 22:39	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/16 22:39	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/16 22:39	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/16 22:39	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/16 22:39	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/16 22:39	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 22:39	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 22:39	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 22:39	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/16 22:39	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 22:39	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/16 22:39	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 22:39	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 22:39	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/16 22:39	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/16 22:39	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 22:39	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/16 22:39	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/16 22:39	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/16 22:39	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/16 22:39	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/16 22:39	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/16 22:39	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/16 22:39	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 22:39	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/16 22:39	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 22:39	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/16 22:39	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/16 22:39	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/16 22:39	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/16 22:39	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/16 22:39	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/16 22:39	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/16 22:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120		12/06/16 22:39	1
Dibromofluoromethane	96		75 - 120		12/06/16 22:39	1
1,2-Dichloroethane-d4 (Surr)	95		69 - 134		12/06/16 22:39	1
Toluene-d8 (Surr)	104		75 - 123		12/06/16 22:39	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363772/3**

**Matrix: Solid**

**Analysis Batch: 363772**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0468		mg/Kg		94	40 - 148
Benzene	0.0500	0.0454		mg/Kg		91	70 - 120
Bromodichloromethane	0.0500	0.0462		mg/Kg		92	67 - 120
Bromoform	0.0500	0.0472		mg/Kg		94	50 - 129
Bromomethane	0.0500	0.0457		mg/Kg		91	50 - 134
2-Butanone (MEK)	0.0500	0.0480		mg/Kg		96	47 - 138
Carbon disulfide	0.0500	0.0440		mg/Kg		88	67 - 133
Carbon tetrachloride	0.0500	0.0440		mg/Kg		88	65 - 123
Chlorobenzene	0.0500	0.0456		mg/Kg		91	70 - 120
Chloroethane	0.0500	0.0438		mg/Kg		88	40 - 150
Chloroform	0.0500	0.0466		mg/Kg		93	70 - 120
Chloromethane	0.0500	0.0441		mg/Kg		88	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0458		mg/Kg		92	70 - 120
Dibromochloromethane	0.0500	0.0492		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0448		mg/Kg		90	70 - 125
1,2-Dichloroethane	0.0500	0.0475		mg/Kg		95	65 - 126
1,1-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 122
1,2-Dichloropropane	0.0500	0.0442		mg/Kg		88	70 - 126
Ethylbenzene	0.0500	0.0454		mg/Kg		91	70 - 120
2-Hexanone	0.0500	0.0517		mg/Kg		103	51 - 139
Methylene Chloride	0.0500	0.0474		mg/Kg		95	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0505		mg/Kg		101	51 - 141
Methyl tert-butyl ether	0.0500	0.0448		mg/Kg		90	70 - 121
Styrene	0.0500	0.0462		mg/Kg		92	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0501		mg/Kg		100	70 - 125
Tetrachloroethene	0.0500	0.0465		mg/Kg		93	70 - 122
Toluene	0.0500	0.0464		mg/Kg		93	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0456		mg/Kg		91	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0464		mg/Kg		93	70 - 121
1,1,1-Trichloroethane	0.0500	0.0446		mg/Kg		89	70 - 120
1,1,2-Trichloroethane	0.0500	0.0481		mg/Kg		96	70 - 120
Trichloroethene	0.0500	0.0453		mg/Kg		91	70 - 124
Vinyl acetate	0.0500	0.0316		mg/Kg		63	40 - 150
Vinyl chloride	0.0500	0.0462		mg/Kg		92	64 - 125
Xylenes, Total	0.100	0.0931		mg/Kg		93	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 120
Dibromofluoromethane	96		75 - 120
1,2-Dichloroethane-d4 (Surr)	98		69 - 134
Toluene-d8 (Surr)	104		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-364515/1-A**

**Matrix: Solid**

**Analysis Batch: 364605**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 364515**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/10/16 10:34	12/12/16 12:41	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364515/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364605**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364515**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/10/16 10:34	12/12/16 12:41	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/10/16 10:34	12/12/16 12:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	110		40 - 130	12/10/16 10:34	12/12/16 12:41	1
Phenol-d5	119		36 - 123	12/10/16 10:34	12/12/16 12:41	1
Nitrobenzene-d5	104		33 - 124	12/10/16 10:34	12/12/16 12:41	1
2-Fluorobiphenyl	91		42 - 115	12/10/16 10:34	12/12/16 12:41	1
2,4,6-Tribromophenol	69		25 - 130	12/10/16 10:34	12/12/16 12:41	1
Terphenyl-d14	106		25 - 150	12/10/16 10:34	12/12/16 12:41	1

**Lab Sample ID: LCS 500-364515/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364605**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364515**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.51		mg/Kg		113	55 - 118
Bis(2-chloroethyl)ether	1.33	1.32		mg/Kg		99	53 - 116
1,3-Dichlorobenzene	1.33	1.13		mg/Kg		85	56 - 110
1,4-Dichlorobenzene	1.33	1.16		mg/Kg		87	57 - 110
1,2-Dichlorobenzene	1.33	1.14		mg/Kg		85	56 - 110
2-Methylphenol	1.33	1.28		mg/Kg		96	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.24		mg/Kg		93	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.45		mg/Kg		109	56 - 119
Hexachloroethane	1.33	1.17		mg/Kg		88	54 - 111
2-Chlorophenol	1.33	1.15		mg/Kg		86	57 - 117
Nitrobenzene	1.33	1.42		mg/Kg		106	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.37		mg/Kg		102	59 - 116
1,2,4-Trichlorobenzene	1.33	1.13		mg/Kg		85	60 - 116
Isophorone	1.33	1.24		mg/Kg		93	54 - 120
2,4-Dimethylphenol	1.33	1.18		mg/Kg		88	50 - 120
Hexachlorobutadiene	1.33	1.07		mg/Kg		80	56 - 120
Naphthalene	1.33	1.15		mg/Kg		86	58 - 116
2,4-Dichlorophenol	1.33	1.20		mg/Kg		90	61 - 116

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364515/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364605**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364515**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.72		mg/Kg		129	10 - 150
2,4,6-Trichlorophenol	1.33	1.10		mg/Kg		82	50 - 120
2,4,5-Trichlorophenol	1.33	1.06		mg/Kg		80	42 - 119
Hexachlorocyclopentadiene	1.33	<0.67	*	mg/Kg		7	10 - 116
2-Methylnaphthalene	1.33	1.15		mg/Kg		86	55 - 120
2-Nitroaniline	1.33	1.57		mg/Kg		118	52 - 121
2-Chloronaphthalene	1.33	1.22		mg/Kg		91	57 - 112
4-Chloro-3-methylphenol	1.33	1.39		mg/Kg		104	59 - 117
2,6-Dinitrotoluene	1.33	1.28		mg/Kg		96	57 - 118
2-Nitrophenol	1.33	1.26		mg/Kg		95	58 - 121
3-Nitroaniline	1.33	1.35		mg/Kg		101	20 - 144
Dimethyl phthalate	1.33	1.20		mg/Kg		90	60 - 112
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		7	10 - 110
Acenaphthylene	1.33	1.18		mg/Kg		89	57 - 116
2,4-Dinitrotoluene	1.33	1.26		mg/Kg		95	59 - 119
Acenaphthene	1.33	1.10		mg/Kg		82	52 - 113
Dibenzofuran	1.33	1.19		mg/Kg		89	59 - 110
4-Nitrophenol	2.67	1.98		mg/Kg		74	32 - 123
Fluorene	1.33	1.20		mg/Kg		90	56 - 115
4-Nitroaniline	1.33	2.03	*	mg/Kg		152	55 - 146
4-Bromophenyl phenyl ether	1.33	1.21		mg/Kg		90	61 - 124
Hexachlorobenzene	1.33	1.19		mg/Kg		90	62 - 126
Diethyl phthalate	1.33	1.32		mg/Kg		99	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.23		mg/Kg		92	61 - 111
Pentachlorophenol	2.67	0.885		mg/Kg		33	12 - 116
N-Nitrosodiphenylamine	1.33	1.25		mg/Kg		94	62 - 117
4,6-Dinitro-2-methylphenol	2.67	0.568	J	mg/Kg		21	10 - 110
Phenanthrene	1.33	1.21		mg/Kg		91	58 - 125
Anthracene	1.33	1.22		mg/Kg		92	57 - 118
Carbazole	1.33	1.48		mg/Kg		111	65 - 137
Di-n-butyl phthalate	1.33	1.29		mg/Kg		97	61 - 123
Fluoranthene	1.33	1.26		mg/Kg		94	61 - 124
Pyrene	1.33	1.19		mg/Kg		90	60 - 115
Butyl benzyl phthalate	1.33	1.31		mg/Kg		99	61 - 115
Benzo[a]anthracene	1.33	1.27		mg/Kg		95	63 - 115
Chrysene	1.33	1.20		mg/Kg		90	63 - 118
3,3'-Dichlorobenzidine	1.33	1.11		mg/Kg		83	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.36		mg/Kg		102	62 - 117
Di-n-octyl phthalate	1.33	1.43		mg/Kg		107	58 - 129
Benzo[b]fluoranthene	1.33	1.35		mg/Kg		101	61 - 123
Benzo[k]fluoranthene	1.33	1.35		mg/Kg		101	59 - 125
Benzo[a]pyrene	1.33	1.54		mg/Kg		115	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.36		mg/Kg		102	50 - 149
Dibenz(a,h)anthracene	1.33	1.36		mg/Kg		102	61 - 134
Benzo[g,h,i]perylene	1.33	1.40		mg/Kg		105	55 - 134
3 & 4 Methylphenol	1.33	1.41		mg/Kg		106	55 - 124

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID:** LCS 500-364515/2-A  
**Matrix:** Solid  
**Analysis Batch:** 364605

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 364515

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	104		40 - 130
Phenol-d5	108		36 - 123
Nitrobenzene-d5	100		33 - 124
2-Fluorobiphenyl	84		42 - 115
2,4,6-Tribromophenol	85		25 - 130
Terphenyl-d14	98		25 - 150

## Method: 6010B - Metals (ICP)

**Lab Sample ID:** LCS 500-363771/2-A  
**Matrix:** Solid  
**Analysis Batch:** 364150

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 363771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cadmium	0.0500	0.0503		mg/L		101	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Manganese	0.500	0.538		mg/L		108	80 - 120

**Lab Sample ID:** LCS 500-363823/2-A  
**Matrix:** Solid  
**Analysis Batch:** 364125

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 363823

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	2.00	1.83		mg/L		92	80 - 120
Beryllium	0.0500	0.0467		mg/L		93	80 - 120
Boron	1.00	0.813		mg/L		81	80 - 120
Cadmium	0.0500	0.0442		mg/L		88	80 - 120
Chromium	0.200	0.181		mg/L		91	80 - 120
Cobalt	0.500	0.456		mg/L		91	80 - 120
Iron	1.00	0.965		mg/L		96	80 - 120
Lead	0.100	0.0909		mg/L		91	80 - 120
Manganese	0.500	0.459		mg/L		92	80 - 120
Nickel	0.500	0.455		mg/L		91	80 - 120
Selenium	0.100	0.0806		mg/L		81	80 - 120
Silver	0.0500	0.0430		mg/L		86	80 - 120
Zinc	0.500	0.452	J	mg/L		90	80 - 120

**Lab Sample ID:** MB 500-363943/1-A  
**Matrix:** Solid  
**Analysis Batch:** 364126

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 363943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.42	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Barium	<1.0		1.0	0.18	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Boron	<5.0		5.0	0.70	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/07/16 08:45	12/07/16 15:50	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-363943/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364126**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363943**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<20		20	6.4	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Chromium	0.519	J	1.0	0.17	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Copper	0.237	J	1.0	0.22	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Iron	10.0	J	20	7.7	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Lead	<0.50		0.50	0.25	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Magnesium	<10		10	4.1	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Nickel	<1.0		1.0	0.27	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Potassium	<50		50	8.2	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Silver	<0.50		0.50	0.12	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Sodium	<100		100	13	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/07/16 08:45	12/07/16 15:50	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/07/16 08:45	12/07/16 15:50	1

**Lab Sample ID: LCS 500-363943/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364126**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363943**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	45.1		mg/Kg		90	80 - 120
Arsenic	10.0	8.56		mg/Kg		86	80 - 120
Barium	200	185		mg/Kg		92	80 - 120
Beryllium	5.00	4.64		mg/Kg		93	80 - 120
Boron	100	83.1		mg/Kg		83	80 - 120
Cadmium	5.00	4.58		mg/Kg		92	80 - 120
Calcium	1000	887		mg/Kg		89	80 - 120
Chromium	20.0	18.9		mg/Kg		95	80 - 120
Cobalt	50.0	46.7		mg/Kg		93	80 - 120
Copper	25.0	23.9		mg/Kg		96	80 - 120
Iron	100	97.8		mg/Kg		98	80 - 120
Lead	10.0	8.85		mg/Kg		88	80 - 120
Magnesium	1000	886		mg/Kg		89	80 - 120
Manganese	50.0	45.5		mg/Kg		91	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Potassium	1000	905		mg/Kg		91	80 - 120
Selenium	10.0	8.57		mg/Kg		86	80 - 120
Silver	5.00	4.36		mg/Kg		87	80 - 120
Sodium	1000	945		mg/Kg		94	80 - 120
Thallium	10.0	8.95		mg/Kg		90	80 - 120
Vanadium	50.0	46.4		mg/Kg		93	80 - 120
Zinc	50.0	45.6		mg/Kg		91	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-120935-1 MS**

**Matrix: Solid**

**Analysis Batch: 364126**

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Prep Type: Total/NA**

**Prep Batch: 363943**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<1.0	F1	26.1	5.23	F1	mg/Kg	☼	20	75 - 125
Arsenic	2.2		5.22	7.63		mg/Kg	☼	105	75 - 125
Barium	51	F1	104	125	F1	mg/Kg	☼	71	75 - 125
Beryllium	0.44		2.61	2.57		mg/Kg	☼	81	75 - 125
Boron	2.6	F1	52.2	34.3	F1	mg/Kg	☼	61	75 - 125
Cadmium	0.14	F1	2.61	2.21		mg/Kg	☼	79	75 - 125
Calcium	19000	F2	522	37400	E 4	mg/Kg	☼	3442	75 - 125
Chromium	12	B	10.4	21.2		mg/Kg	☼	88	75 - 125
Cobalt	6.7		26.1	32.7		mg/Kg	☼	100	75 - 125
Copper	11	B	13.1	22.8		mg/Kg	☼	87	75 - 125
Iron	10000	B	52.2	12600	4	mg/Kg	☼	4288	75 - 125
Lead	9.5		5.22	14.2		mg/Kg	☼	90	75 - 125
Magnesium	11000	F2	522	20100	4	mg/Kg	☼	1824	75 - 125
Manganese	180	F2	26.1	287	4	mg/Kg	☼	412	75 - 125
Nickel	17		26.1	42.1		mg/Kg	☼	94	75 - 125
Potassium	740	F1 F2	522	1590	F1	mg/Kg	☼	163	75 - 125
Selenium	0.52	F1	5.22	3.64	F1	mg/Kg	☼	60	75 - 125
Silver	<0.25	F1	2.61	1.99		mg/Kg	☼	76	75 - 125
Sodium	500		522	903		mg/Kg	☼	76	75 - 125
Thallium	<0.50		5.22	4.15		mg/Kg	☼	79	75 - 125
Vanadium	19		26.1	39.9		mg/Kg	☼	80	75 - 125
Zinc	40		26.1	68.0		mg/Kg	☼	107	75 - 125

**Lab Sample ID: 500-120935-1 MSD**

**Matrix: Solid**

**Analysis Batch: 364126**

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Prep Type: Total/NA**

**Prep Batch: 363943**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<1.0	F1	24.8	4.95	F1	mg/Kg	☼	20	75 - 125	5	20
Arsenic	2.2		4.95	6.28		mg/Kg	☼	83	75 - 125	20	20
Barium	51	F1	99.0	132		mg/Kg	☼	82	75 - 125	5	20
Beryllium	0.44		2.48	2.39		mg/Kg	☼	79	75 - 125	7	20
Boron	2.6	F1	49.5	28.0	F1	mg/Kg	☼	51	75 - 125	20	20
Cadmium	0.14	F1	2.48	1.94	F1	mg/Kg	☼	73	75 - 125	13	20
Calcium	19000	F2	495	12600	4 F2	mg/Kg	☼	-1387	75 - 125	99	20
Chromium	12	B	9.90	22.5		mg/Kg	☼	105	75 - 125	6	20
Cobalt	6.7		24.8	31.9		mg/Kg	☼	102	75 - 125	3	20
Copper	11	B	12.4	22.3		mg/Kg	☼	88	75 - 125	2	20
Iron	10000	B	49.5	12200	4	mg/Kg	☼	3573	75 - 125	4	20
Lead	9.5		4.95	15.5		mg/Kg	☼	121	75 - 125	9	20
Magnesium	11000	F2	495	7630	4 F2	mg/Kg	☼	-587	75 - 125	90	20
Manganese	180	F2	24.8	163	4 F2	mg/Kg	☼	-66	75 - 125	55	20
Nickel	17		24.8	42.6		mg/Kg	☼	101	75 - 125	1	20
Potassium	740	F1 F2	495	1210	F2	mg/Kg	☼	96	75 - 125	27	20
Selenium	0.52	F1	4.95	3.41	F1	mg/Kg	☼	58	75 - 125	7	20
Silver	<0.25	F1	2.48	1.66	F1	mg/Kg	☼	67	75 - 125	18	20
Sodium	500		495	923		mg/Kg	☼	85	75 - 125	2	20
Thallium	<0.50		4.95	4.18		mg/Kg	☼	84	75 - 125	1	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-120935-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364126**

**Client Sample ID: 1314V3-01-B28 (0-4.5)**  
**Prep Type: Total/NA**  
**Prep Batch: 363943**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	Limit	
Vanadium	19		24.8	43.1		mg/Kg	☼	97	75 - 125	8	20
Zinc	40		24.8	70.3		mg/Kg	☼	122	75 - 125	3	20

**Lab Sample ID: 500-120935-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 364126**

**Client Sample ID: 1314V3-01-B28 (0-4.5)**  
**Prep Type: Total/NA**  
**Prep Batch: 363943**

Analyte	Sample	Sample	DU		Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier				Limit	
Antimony	<1.0	F1	<0.97		mg/Kg	☼	NC	20	
Arsenic	2.2		2.46		mg/Kg	☼	13	20	
Barium	51	F1	55.2		mg/Kg	☼	9	20	
Beryllium	0.44		0.452		mg/Kg	☼	2	20	
Boron	2.6	F1	1.88	J F5	mg/Kg	☼	31	20	
Cadmium	0.14	F1	0.134		mg/Kg	☼	2	20	
Calcium	19000	F2	10600	F3	mg/Kg	☼	59	20	
Chromium	12	B	12.6		mg/Kg	☼	4	20	
Cobalt	6.7		6.76		mg/Kg	☼	0.9	20	
Copper	11	B	12.0		mg/Kg	☼	5	20	
Iron	10000	B	10400		mg/Kg	☼	0	20	
Lead	9.5		11.2		mg/Kg	☼	16	20	
Magnesium	11000	F2	6340	F3	mg/Kg	☼	50	20	
Manganese	180	F2	125	F3	mg/Kg	☼	36	20	
Nickel	17		16.5		mg/Kg	☼	6	20	
Potassium	740	F1 F2	624		mg/Kg	☼	17	20	
Selenium	0.52	F1	<0.48		mg/Kg	☼	NC	20	
Silver	<0.25	F1	<0.24		mg/Kg	☼	NC	20	
Sodium	500		535		mg/Kg	☼	6	20	
Thallium	<0.50		<0.48		mg/Kg	☼	NC	20	
Vanadium	19		21.0		mg/Kg	☼	10	20	
Zinc	40		45.7		mg/Kg	☼	13	20	

**Lab Sample ID: LB 500-363730/1-C**  
**Matrix: Solid**  
**Analysis Batch: 364125**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363823**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 12:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/16 14:18	12/07/16 12:21	1
Boron	<0.50		0.50	0.050	mg/L		12/06/16 14:18	12/07/16 12:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 14:18	12/07/16 12:21	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Iron	<0.40		0.40	0.20	mg/L		12/06/16 14:18	12/07/16 12:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 14:18	12/07/16 12:21	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/16 14:18	12/07/16 12:21	1
Silver	<0.025		0.025	0.010	mg/L		12/06/16 14:18	12/07/16 12:21	1
Zinc	0.0968	J	0.50	0.020	mg/L		12/06/16 14:18	12/07/16 12:21	1

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Lab Sample ID: LB 500-363725/1-B**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 363771**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/16 09:57	12/08/16 00:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/16 09:57	12/08/16 00:48	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/16 09:57	12/08/16 00:48	1

**Lab Sample ID: 500-120935-8 MS**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-01-B35 (14-20)**  
**Prep Type: SPLP East**  
**Prep Batch: 363771**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Manganese	0.42		0.500	0.945		mg/L		106	50 - 150

**Lab Sample ID: 500-120935-8 DU**  
**Matrix: Solid**  
**Analysis Batch: 364150**

**Client Sample ID: 1314V3-01-B35 (14-20)**  
**Prep Type: SPLP East**  
**Prep Batch: 363771**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.42		0.403		mg/L		3	20

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: LCS 500-363823/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364154**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363823**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.431		mg/L		86	80 - 120
Thallium	0.100	0.0917		mg/L		92	80 - 120

**Lab Sample ID: LB 500-363730/1-C**  
**Matrix: Solid**  
**Analysis Batch: 364154**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363823**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/16 14:18	12/07/16 20:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/16 14:18	12/07/16 20:34	1

## Method: 7470A - TCLP Mercury

**Lab Sample ID: MB 500-363808/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363808**

Analyte	MB Result	MB 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 10:48	1

**Lab Sample ID: LCS 500-363808/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363808**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00196		mg/L		98	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Method: 7470A - TCLP Mercury (Continued)

**Lab Sample ID: LB 500-363730/1-B**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 363808**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/16 13:45	12/07/16 10:54	1

**Lab Sample ID: 500-120935-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: 1314V3-01-B28 (0-4.5)**  
**Prep Type: TCLP**  
**Prep Batch: 363808**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000824		mg/L		82	50 - 150

**Lab Sample ID: 500-120935-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 363991**

**Client Sample ID: 1314V3-01-B28 (0-4.5)**  
**Prep Type: TCLP**  
**Prep Batch: 363808**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-363688/12-A**  
**Matrix: Solid**  
**Analysis Batch: 363848**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 363688**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg		12/05/16 16:00	12/06/16 13:11	1

**Lab Sample ID: LCS 500-363688/13-A**  
**Matrix: Solid**  
**Analysis Batch: 363848**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 363688**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.165		mg/Kg		99	80 - 120

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Lab Sample ID: 500-120935-1**

**Date Collected: 12/02/16 08:30**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:01	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 14:37	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:41	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 10:55	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B28 (0-4.5)**

**Lab Sample ID: 500-120935-1**

**Date Collected: 12/02/16 08:30**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 05:19	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 14:24	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:10	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:45	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

**Date Collected: 12/02/16 09:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:08	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 14:42	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:44	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

**Date Collected: 12/02/16 09:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:00	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B27 (0-8)**

**Lab Sample ID: 500-120935-2**

**Date Collected: 12/02/16 09:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 05:44	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 17:49	AJD	TAL CHI
Total/NA	Prep	3541	DL		364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D	DL	10	364791	12/13/16 11:02	GES	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:30	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:47	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B27 (8-15)**

**Lab Sample ID: 500-120935-3**

**Date Collected: 12/02/16 10:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:15	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 14:47	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:47	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:01	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B27 (8-15)**

**Lab Sample ID: 500-120935-3**

**Date Collected: 12/02/16 10:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 06:09	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 18:15	AJD	TAL CHI
Total/NA	Prep	3541	DL2		364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D	DL2	100	364791	12/13/16 10:36	GES	TAL CHI
Total/NA	Prep	3541	DL		364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D	DL	20	364791	12/13/16 11:27	GES	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:34	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:48	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B27 (15-22)**

**Lab Sample ID: 500-120935-4**

**Date Collected: 12/02/16 10:05**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:22	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:15	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:51	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:03	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B27 (15-22)**

**Lab Sample ID: 500-120935-4**

**Date Collected: 12/02/16 10:05**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 06:34	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 14:50	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:38	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:50	MJD	TAL CHI

## Client Sample ID: 1314V3-01-B35 (0-7)

## Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45  
Date Received: 12/02/16 16:15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:29	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:20	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:54	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:04	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

## Client Sample ID: 1314V3-01-B35 (0-7)

## Lab Sample ID: 500-120935-5

Date Collected: 12/02/16 10:45  
Date Received: 12/02/16 16:15

Matrix: Solid  
Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 06:59	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 15:15	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:42	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:51	MJD	TAL CHI

## Client Sample ID: 1314V3-01-B35 (0-7)D

## Lab Sample ID: 500-120935-6

Date Collected: 12/02/16 10:45  
Date Received: 12/02/16 16:15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:35	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:25	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (0-7)D**

**Lab Sample ID: 500-120935-6**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 20:58	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:06	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B35 (0-7)D**

**Lab Sample ID: 500-120935-6**

**Date Collected: 12/02/16 10:45**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 84.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 07:24	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 15:41	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:45	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:53	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B35 (7-14)**

**Lab Sample ID: 500-120935-7**

**Date Collected: 12/02/16 10:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 01:42	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:29	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 21:01	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:10	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Client Sample ID: 1314V3-01-B35 (7-14)**

**Lab Sample ID: 500-120935-7**

**Date Collected: 12/02/16 10:55**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 85.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 07:48	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 16:07	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 16:56	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:54	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B35 (14-20)**

**Lab Sample ID: 500-120935-8**

**Date Collected: 12/02/16 11:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			363725	12/05/16 13:12	RMP	TAL CHI
SPLP East	Prep	3010A			363771	12/06/16 09:57	JEF	TAL CHI
SPLP East	Analysis	6010B		1	364150	12/08/16 02:05	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6010B		1	364125	12/07/16 15:34	PJ1	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	3010A			363823	12/06/16 14:18	JNH	TAL CHI
TCLP	Analysis	6020A		1	364154	12/07/16 21:04	FXG	TAL CHI
TCLP	Leach	1311			363730	12/05/16 16:07	RMP	TAL CHI
TCLP	Prep	7470A			363808	12/06/16 13:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	363991	12/07/16 11:12	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364231	12/08/16 15:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363604	12/05/16 10:22	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B35 (14-20)**

**Lab Sample ID: 500-120935-8**

**Date Collected: 12/02/16 11:00**

**Matrix: Solid**

**Date Received: 12/02/16 16:15**

**Percent Solids: 87.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363519	12/02/16 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363772	12/07/16 08:13	DJD	TAL CHI
Total/NA	Prep	3541			364515	12/10/16 10:34	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364605	12/12/16 16:32	AJD	TAL CHI
Total/NA	Prep	3050B			363943	12/07/16 08:45	JEF	TAL CHI
Total/NA	Analysis	6010B		1	364126	12/07/16 17:00	PJ1	TAL CHI
Total/NA	Prep	7471B			363688	12/05/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	363848	12/06/16 13:56	MJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Certification Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-120935-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 6C  
Phone: 708.534.5200 Fax: 708.534



500-120935 COC

Report To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-120935

Chain of Custody Number: EGM-17

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: 4.6

Client		Client Project #		Preservative		Parameter										Preservative Key	
LEE		1009008-6096-01														1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix								Comments	
I74		50012744		Date Time		Matrix											
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix							
Rock Island County, IL		50012744		12-2-16		0830		2 S		VOL							
Sampler		Lab PM		Date		Time		# of Containers		Matrix							
S. Cooper		D Wright		12-2-16		0955		2 S		SUC							
				12-2-16		1000		2 S		Total TAC							
				12-2-16		1005		2 S		metals							
				12-2-16		1045		2 S		TC V/S TP							
				12-2-16		1045		2 S		TAC Metals							
				12-2-16		1055		2 S		pH/40 S/d							
				12-2-16		1100		2 S									
<div style="display: flex; justify-content: space-between;"> <span>Turnaround Time Required (Business Days) <input checked="" type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 5 Days <input type="checkbox"/> 7 Days <input type="checkbox"/> 10 Days <input type="checkbox"/> 15 Days <input type="checkbox"/> Other</span> <span>Requested Due Date _____</span> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>Sample Disposal <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)</span> </div>																	

Relinquished By: <u>[Signature]</u> Company: <u>EE</u> Date: <u>12-2-16</u> Time: <u>1500</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/2/16</u> Time: <u>1500</u>	Lab Courier: <u>TA</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>12/2/16</u> Time: <u>1615</u>	Received By: <u>[Signature]</u> Company: <u>TA-CRT</u> Date: <u>12/2/16</u> Time: <u>1615</u>	Shipped: _____
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: 500-120935-1

**Login Number: 120935**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-121005-1  
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:  
12/19/2016 3:27:16 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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

## Client Sample ID: 1314V3-60-B06 (0-6)

## Lab Sample ID: 500-121005-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.094		0.072	0.0066	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0049	J	0.036	0.0047	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.25		0.036	0.0064	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.19		0.18	0.042	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.26		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	2.5	F1	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.65	F1	0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.43		0.18	0.089	mg/Kg	1	☼	8270D	Total/NA
Pyrene	2.2	F1	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	1.2	F1	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	1.1	F1	0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1.5	F1	0.036	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.50		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.97	F1	0.036	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.34	F1	0.036	0.0093	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.12	F1	0.036	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.32	F1	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene - DL	3.1		0.18	0.033	mg/Kg	5	☼	8270D	Total/NA
Antimony	0.62	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.7		0.55	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	57		0.55	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.26		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	9.1		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	220000		110	36	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.8	B	0.55	0.095	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.6		0.28	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	8.8		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	6600		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	6400		5.5	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	680		0.55	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	450		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		55	7.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.20	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Chromium	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.014	J	0.017	0.0088	mg/Kg	1	☼	7471B	Total/NA
pH	11.8		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: 500-121005-1

**Client Sample ID: 1314V3-60-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.0		0.61	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	120		0.61	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.25	0.053	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	9500		12	4.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	16	B	0.61	0.11	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.31	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.61	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		12	4.7	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7400		6.1	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	820		0.61	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	31		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	900		31	5.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.43	J	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		61	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.31	0.090	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.2	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.072		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.032		0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

**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

**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

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: 1314V3-01-B11 (0-8) (Continued)

## Lab Sample ID: 500-121005-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
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

## Client Sample ID: 1314V3-01-B34 (0-7)

## Lab Sample ID: 500-121005-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.050		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.011	J	0.037	0.0063	mg/Kg	1	☼	8270D	Total/NA

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: 1314V3-01-B34 (0-7) (Continued)**

**Lab Sample ID: 500-121005-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.093		0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.091		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.050		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.056		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.079		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.033	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.055		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.025	J	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0075	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.028	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.8		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	68		0.54	0.099	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.22	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7		2.7	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.27		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000		11	3.5	mg/Kg	1	☼	6010B	Total/NA
Chromium	10	B	0.54	0.093	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.1		0.27	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.2	mg/Kg	1	☼	6010B	Total/NA
Lead	37		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.4	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.54	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	670		27	4.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Sodium	620		54	7.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.27	0.079	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.1	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	1.0		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	3.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.069	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.76		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.070		0.018	0.0093	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B34 (7-14)**

**Lab Sample ID: 500-121005-14**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.056		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0068	J	0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.10		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.078		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.036	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.039		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.043		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA

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: 1314V3-01-B34 (7-14) (Continued)

## Lab Sample ID: 500-121005-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	0.030	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.018	J	0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.020	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.0		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	55		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	3.3		2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	61000		110	36	mg/Kg	10	☼	6010B	Total/NA
Chromium	10	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	9.6		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	8.8		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	720		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.30	J	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Sodium	120		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.043		0.017	0.0089	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B34 (14-20)

## Lab Sample ID: 500-121005-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.34	J F1	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.0	F1 F2	0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.22	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	2.5	J F1	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15		0.11	0.032	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000		11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	11	B	0.56	0.096	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.8	F1 F2	0.28	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		11	4.3	mg/Kg	1	☼	6010B	Total/NA
Lead	8.1		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	15000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	17	F1 F2	0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750	F1	28	4.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J F1	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA

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: 1314V3-01-B34 (14-20) (Continued)**

**Lab Sample ID: 500-121005-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	76		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	2.7		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	3.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.35		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.017	0.0089	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

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: 500-121005-1

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
500-121005-3	1314V3-60-B06 (0-6)	Solid	12/05/16 13:05	12/06/16 10:30
500-121005-4	1314V3-60-B06 (6-12)	Solid	12/05/16 13:10	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
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
500-121005-13	1314V3-01-B34 (0-7)	Solid	12/05/16 16:15	12/06/16 10:30
500-121005-14	1314V3-01-B34 (7-14)	Solid	12/05/16 16:20	12/06/16 10:30
500-121005-15	1314V3-01-B34 (14-20)	Solid	12/05/16 16:24	12/06/16 10:30

# 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

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# 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
<b>Arsenic</b>	<b>2.7</b>		0.58	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Barium</b>	<b>49</b>		0.58	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Beryllium</b>	<b>0.36</b>		0.23	0.051	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Boron</b>	<b>1.7 J</b>		2.9	0.41	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Cadmium</b>	<b>0.18</b>		0.12	0.034	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Calcium</b>	<b>3000</b>		12	3.8	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Chromium</b>	<b>9.2 B</b>		0.58	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Cobalt</b>	<b>4.5</b>		0.29	0.066	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Copper</b>	<b>7.7</b>		0.58	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Iron</b>	<b>9100</b>		12	4.5	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Lead</b>	<b>23</b>		0.29	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Magnesium</b>	<b>1500</b>		5.8	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Manganese</b>	<b>180</b>		0.58	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Nickel</b>	<b>10</b>		0.58	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Potassium</b>	<b>530</b>		29	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Selenium</b>	<b>0.48 J</b>		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
<b>Sodium</b>	<b>41 J</b>		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
<b>Vanadium</b>	<b>12</b>		0.29	0.085	mg/Kg	☼	12/08/16 15:09	12/09/16 13:34	1
<b>Zinc</b>	<b>38</b>		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
<b>Barium</b>	<b>0.22 J</b>		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
<b>Boron</b>	<b>0.11 J</b>		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
<b>Iron</b>	<b>0.27</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.042</b>		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
<b>Zinc</b>	<b>0.022</b>	<b>J</b>	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	<b>0.042</b>		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	<b>7.6</b>		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-Dichloropropane, 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
<b>Arsenic</b>	<b>3.8</b>		0.60	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Barium</b>	<b>86</b>		0.60	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Beryllium</b>	<b>0.55</b>		0.24	0.052	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Boron</b>	<b>2.0</b>	<b>J</b>	3.0	0.42	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Cadmium</b>	<b>0.20</b>		0.12	0.035	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Calcium</b>	<b>5000</b>		12	3.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Chromium</b>	<b>16</b>	<b>B</b>	0.60	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Cobalt</b>	<b>7.6</b>		0.30	0.068	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Copper</b>	<b>13</b>		0.60	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Iron</b>	<b>14000</b>		12	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Lead</b>	<b>8.6</b>		0.30	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Magnesium</b>	<b>4700</b>		6.0	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Manganese</b>	<b>330</b>		0.60	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Nickel</b>	<b>19</b>		0.60	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Potassium</b>	<b>850</b>		30	4.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Selenium</b>	<b>0.33</b>	<b>J</b>	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
<b>Sodium</b>	<b>120</b>		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
<b>Vanadium</b>	<b>19</b>		0.30	0.088	mg/Kg	☼	12/08/16 15:09	12/09/16 13:37	1
<b>Zinc</b>	<b>45</b>		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
<b>Barium</b>	<b>0.45</b>	<b>J</b>	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
<b>Boron</b>	<b>0.11</b>	<b>J</b>	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-B06 (0-6)**

**Lab Sample ID: 500-121005-3**

**Date Collected: 12/05/16 13:05**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 88.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 15:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/06/16 13:50	12/07/16 15:20	1
Dibromofluoromethane	98		75 - 120	12/06/16 13:50	12/07/16 15:20	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/06/16 13:50	12/07/16 15:20	1
Toluene-d8 (Surr)	104		75 - 123	12/06/16 13:50	12/07/16 15:20	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Bis(2-chloroethyl)ether	<0.18	F1 F2	0.18	0.054	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	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-B06 (0-6)**

**Lab Sample ID: 500-121005-3**

**Date Collected: 12/05/16 13:05**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 88.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Hexachloroethane	<0.18	F1	0.18	0.054	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2-Chlorophenol	<0.18	F1	0.18	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,4-Dichlorophenol	<0.36	F1	0.36	0.085	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,4,6-Trichlorophenol	<0.36	F1	0.36	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,4,5-Trichlorophenol	<0.36	F1	0.36	0.082	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Hexachlorocyclopentadiene	<0.72	F1	0.72	0.21	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>2-Methylnaphthalene</b>	<b>0.094</b>		0.072	0.0066	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2-Nitrophenol	<0.36	F1	0.36	0.084	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,4-Dinitrophenol	<0.72	F1	0.72	0.63	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Acenaphthylene</b>	<b>0.0049</b>	<b>J</b>	0.036	0.0047	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Acenaphthene</b>	<b>0.25</b>		0.036	0.0064	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Dibenzofuran</b>	<b>0.19</b>		0.18	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Fluorene</b>	<b>0.26</b>		0.036	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Pentachlorophenol	<0.72	F1	0.72	0.57	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
4,6-Dinitro-2-methylphenol	<0.72	F1	0.72	0.29	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Phenanthrene</b>	<b>2.5</b>	<b>F1</b>	0.036	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Anthracene</b>	<b>0.65</b>	<b>F1</b>	0.036	0.0060	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Carbazole</b>	<b>0.43</b>		0.18	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Pyrene</b>	<b>2.2</b>	<b>F1</b>	0.036	0.0071	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Benzo[a]anthracene</b>	<b>1.2</b>	<b>F1</b>	0.036	0.0048	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Chrysene</b>	<b>1.1</b>	<b>F1</b>	0.036	0.0098	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1

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# 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-B06 (0-6)**

**Lab Sample ID: 500-121005-3**

**Date Collected: 12/05/16 13:05**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 88.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Benzo[b]fluoranthene</b>	<b>1.5</b>	<b>F1</b>	0.036	0.0077	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Benzo[k]fluoranthene</b>	<b>0.50</b>		0.036	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Benzo[a]pyrene</b>	<b>0.97</b>	<b>F1</b>	0.036	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.34</b>	<b>F1</b>	0.036	0.0093	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Dibenz(a,h)anthracene</b>	<b>0.12</b>	<b>F1</b>	0.036	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
<b>Benzo[g,h,i]perylene</b>	<b>0.32</b>	<b>F1</b>	0.036	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 03:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	20	X	40 - 130	12/12/16 09:38	12/14/16 03:03	1
Phenol-d5	79		36 - 123	12/12/16 09:38	12/14/16 03:03	1
Nitrobenzene-d5	70		33 - 124	12/12/16 09:38	12/14/16 03:03	1
2-Fluorobiphenyl	75		42 - 115	12/12/16 09:38	12/14/16 03:03	1
2,4,6-Tribromophenol	32		25 - 130	12/12/16 09:38	12/14/16 03:03	1
Terphenyl-d14	91		25 - 150	12/12/16 09:38	12/14/16 03:03	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Fluoranthene</b>	<b>3.1</b>		0.18	0.033	mg/Kg	☼	12/12/16 09:38	12/14/16 16:27	5

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.62</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Arsenic</b>	<b>1.7</b>		0.55	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Barium</b>	<b>57</b>		0.55	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Beryllium</b>	<b>0.26</b>		0.22	0.048	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Boron</b>	<b>9.1</b>		2.8	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Cadmium</b>	<b>0.17</b>		0.11	0.032	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Calcium</b>	<b>220000</b>		110	36	mg/Kg	☼	12/08/16 15:09	12/09/16 23:18	10
<b>Chromium</b>	<b>9.8</b>	<b>B</b>	0.55	0.095	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Cobalt</b>	<b>4.6</b>		0.28	0.062	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Copper</b>	<b>8.8</b>		0.55	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Iron</b>	<b>6600</b>		11	4.3	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Lead</b>	<b>22</b>		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Magnesium</b>	<b>6400</b>		5.5	2.2	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Manganese</b>	<b>680</b>		0.55	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Nickel</b>	<b>11</b>		0.55	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Potassium</b>	<b>450</b>		28	4.5	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Selenium</b>	<b>0.63</b>		0.55	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Sodium</b>	<b>170</b>		55	7.3	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Vanadium</b>	<b>12</b>		0.28	0.081	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1
<b>Zinc</b>	<b>34</b>		1.1	0.35	mg/Kg	☼	12/08/16 15:09	12/09/16 13:42	1

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# 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-B06 (0-6)**

**Lab Sample ID: 500-121005-3**

**Date Collected: 12/05/16 13:05**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 88.3**

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.20</b>	<b>J</b>	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 17:31	1
<b>Boron</b>	<b>0.15</b>	<b>J</b>	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 17:31	1
<b>Chromium</b>	<b>0.015</b>	<b>J</b>	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:31	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:31	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 17:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 17:31	1
Manganese	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:31	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:31	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 17:31	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:31	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 17:31	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 16:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 16:45	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		12/08/16 12:45	12/09/16 09:44	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.014</b>	<b>J</b>	0.017	0.0088	mg/Kg	✱	12/07/16 14:45	12/08/16 11:08	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>11.8</b>		0.2	0.2	SU			12/09/16 19:07	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-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

**Date Collected: 12/05/16 13:10**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 79.0**

## 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	☼	12/06/16 13:50	12/07/16 15:44	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 15:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/06/16 13:50	12/07/16 15:44	1
Dibromofluoromethane	98		75 - 120	12/06/16 13:50	12/07/16 15:44	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134	12/06/16 13:50	12/07/16 15:44	1
Toluene-d8 (Surr)	102		75 - 123	12/06/16 13:50	12/07/16 15:44	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 20:45	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	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-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

**Date Collected: 12/05/16 13:10**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 79.0**

**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 20:45	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	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-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

**Date Collected: 12/05/16 13:10**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 79.0**

**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	☼	12/12/16 09:38	12/13/16 20:45	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/12/16 09:38	12/13/16 20:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		40 - 130	12/12/16 09:38	12/13/16 20:45	1
Phenol-d5	82		36 - 123	12/12/16 09:38	12/13/16 20:45	1
Nitrobenzene-d5	78		33 - 124	12/12/16 09:38	12/13/16 20:45	1
2-Fluorobiphenyl	77		42 - 115	12/12/16 09:38	12/13/16 20:45	1
2,4,6-Tribromophenol	88		25 - 130	12/12/16 09:38	12/13/16 20:45	1
Terphenyl-d14	95		25 - 150	12/12/16 09:38	12/13/16 20:45	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 13:47	1
<b>Arsenic</b>	<b>7.0</b>		0.61	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Barium</b>	<b>120</b>		0.61	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Beryllium</b>	<b>0.56</b>		0.25	0.053	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Boron</b>	<b>2.5 J</b>		3.1	0.43	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Cadmium</b>	<b>0.44</b>		0.12	0.036	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Calcium</b>	<b>9500</b>		12	4.0	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Chromium</b>	<b>16 B</b>		0.61	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Cobalt</b>	<b>11</b>		0.31	0.069	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Copper</b>	<b>14</b>		0.61	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Iron</b>	<b>18000</b>		12	4.7	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Lead</b>	<b>10</b>		0.31	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Magnesium</b>	<b>7400</b>		6.1	2.5	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Manganese</b>	<b>820</b>		0.61	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Nickel</b>	<b>31</b>		0.61	0.17	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Potassium</b>	<b>900</b>		31	5.0	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Selenium</b>	<b>0.43 J</b>		0.61	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
Silver	<0.31		0.31	0.072	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Sodium</b>	<b>180</b>		61	8.1	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Vanadium</b>	<b>25</b>		0.31	0.090	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1
<b>Zinc</b>	<b>49</b>		1.2	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 13:47	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.61</b>		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 17:38	1
<b>Boron</b>	<b>0.070 J</b>		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:38	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-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

**Date Collected: 12/05/16 13:10**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 79.0**

**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 17:38	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
Iron	<0.40		0.40	0.20	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
<b>Manganese</b>	<b>0.072</b>		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
Silver	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 17:38	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/08/16 14:21	12/10/16 17:38	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	-	12/08/16 14:21	12/09/16 16:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/08/16 14:21	12/09/16 16:49	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	-	12/08/16 12:45	12/09/16 09:46	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.032</b>		0.018	0.0096	mg/Kg	☼	12/07/16 14:45	12/08/16 11:15	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<b>8.3</b>		0.2	0.2	SU	-		12/09/16 19:10	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
<b>Phenanthrene</b>	<b>0.0059</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.027</b>	<b>J</b>	0.040	0.0075	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
<b>Pyrene</b>	<b>0.023</b>	<b>J</b>	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
<b>Benzo[a]anthracene</b>	<b>0.011</b>	<b>J</b>	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
<b>Chrysene</b>	<b>0.020</b>	<b>J</b>	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
<b>Benzo[b]fluoranthene</b>	<b>0.028</b>	<b>J</b>	0.040	0.0087	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
<b>Benzo[k]fluoranthene</b>	<b>0.013</b>	<b>J</b>	0.040	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
<b>Benzo[a]pyrene</b>	<b>0.016</b>	<b>J</b>	0.040	0.0078	mg/Kg	☼	12/12/16 09:38	12/13/16 21:14	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.015</b>	<b>J</b>	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
<b>Benzo[g,h,i]perylene</b>	<b>0.019</b>	<b>J</b>	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
<b>Arsenic</b>	<b>2.2</b>		0.60	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Barium</b>	<b>70</b>		0.60	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Beryllium</b>	<b>0.48</b>		0.24	0.052	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Boron</b>	<b>1.6</b>	<b>J</b>	3.0	0.42	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Cadmium</b>	<b>0.24</b>		0.12	0.035	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Calcium</b>	<b>3300</b>		12	3.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Chromium</b>	<b>11</b>	<b>B</b>	0.60	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Cobalt</b>	<b>7.0</b>		0.30	0.068	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Copper</b>	<b>9.5</b>		0.60	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Iron</b>	<b>11000</b>		12	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Lead</b>	<b>13</b>		0.30	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Magnesium</b>	<b>1800</b>		6.0	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Manganese</b>	<b>300</b>		0.60	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Nickel</b>	<b>15</b>		0.60	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Potassium</b>	<b>750</b>		30	4.9	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Selenium</b>	<b>0.32</b>	<b>J</b>	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
<b>Sodium</b>	<b>120</b>		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
<b>Vanadium</b>	<b>12</b>		0.30	0.088	mg/Kg	☼	12/08/16 15:09	12/09/16 13:58	1
<b>Zinc</b>	<b>46</b>		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
<b>Barium</b>	<b>0.24</b>	<b>J</b>	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
<b>Boron</b>	<b>0.065</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.012</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.064</b>		0.042	0.0078	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
<b>Pyrene</b>	<b>0.051</b>		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
<b>Benzo[a]anthracene</b>	<b>0.020</b>	<b>J</b>	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
<b>Chrysene</b>	<b>0.041</b>	<b>J</b>	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
<b>Benzo[b]fluoranthene</b>	<b>0.057</b>		0.042	0.0091	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
<b>Benzo[k]fluoranthene</b>	<b>0.023</b>	<b>J</b>	0.042	0.012	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
<b>Benzo[a]pyrene</b>	<b>0.032</b>	<b>J</b>	0.042	0.0081	mg/Kg	☼	12/12/16 09:38	12/13/16 21:43	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.029</b>	<b>J</b>	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
<b>Benzo[g,h,i]perylene</b>	<b>0.037</b>	<b>J</b>	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
<b>Arsenic</b>	<b>2.9</b>		0.62	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Barium</b>	<b>72</b>		0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Beryllium</b>	<b>0.50</b>		0.25	0.053	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Boron</b>	<b>1.8</b>	<b>J</b>	3.1	0.43	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Cadmium</b>	<b>0.21</b>		0.12	0.036	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Calcium</b>	<b>3600</b>		12	4.0	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Cobalt</b>	<b>7.0</b>		0.31	0.070	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Copper</b>	<b>10</b>		0.62	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Iron</b>	<b>13000</b>		12	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Lead</b>	<b>10</b>		0.31	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Magnesium</b>	<b>2700</b>		6.2	2.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Manganese</b>	<b>280</b>		0.62	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Nickel</b>	<b>15</b>		0.62	0.17	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Potassium</b>	<b>770</b>		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
<b>Sodium</b>	<b>130</b>		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
<b>Vanadium</b>	<b>16</b>		0.31	0.090	mg/Kg	☼	12/08/16 15:09	12/09/16 14:03	1
<b>Zinc</b>	<b>43</b>		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
<b>Barium</b>	<b>0.38</b>	<b>J</b>	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
<b>Boron</b>	<b>0.060</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.042</b>		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
<b>Mercury</b>	<b>0.029</b>		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
<b>pH</b>	<b>7.8</b>		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
<b>Phenanthrene</b>	<b>0.052</b>		0.039	0.0055	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
<b>Anthracene</b>	<b>0.0084 J</b>		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
<b>Fluoranthene</b>	<b>0.079</b>		0.039	0.0073	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
<b>Pyrene</b>	<b>0.092</b>		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
<b>Benzo[a]anthracene</b>	<b>0.036 J</b>		0.039	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1

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# 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
<b>Chrysene</b>	<b>0.045</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.054</b>		0.039	0.0085	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
<b>Benzo[k]fluoranthene</b>	<b>0.040</b>		0.039	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
<b>Benzo[a]pyrene</b>	<b>0.043</b>		0.039	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.028</b>	J	0.039	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0090</b>	J	0.039	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 03:32	1
<b>Benzo[g,h,i]perylene</b>	<b>0.051</b>		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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Arsenic</b>	<b>3.1</b>		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Barium</b>	<b>75</b>		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Beryllium</b>	<b>0.44</b>		0.23	0.050	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Boron</b>	<b>1.8</b>	J	2.9	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Cadmium</b>	<b>0.26</b>		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Calcium</b>	<b>18000</b>		11	3.7	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Chromium</b>	<b>12</b>	B	0.57	0.098	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Cobalt</b>	<b>6.1</b>		0.29	0.065	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Copper</b>	<b>9.1</b>		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Iron</b>	<b>11000</b>		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Lead</b>	<b>26</b>		0.29	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Magnesium</b>	<b>7000</b>		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Manganese</b>	<b>380</b>		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Nickel</b>	<b>14</b>		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Potassium</b>	<b>550</b>		29	4.7	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Selenium</b>	<b>0.47</b>	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
<b>Sodium</b>	<b>290</b>		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
<b>Vanadium</b>	<b>16</b>		0.29	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:07	1
<b>Zinc</b>	<b>45</b>		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
<b>Barium</b>	<b>0.74</b>		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
<b>Boron</b>	<b>0.068</b>	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
<b>Manganese</b>	<b>1.8</b>		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
<b>Zinc</b>	<b>0.049</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.49</b>		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
<b>Mercury</b>	<b>0.029</b>		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
<b>pH</b>	<b>8.9</b>		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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Arsenic</b>	<b>2.5</b>		0.59	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Barium</b>	<b>76</b>		0.59	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Beryllium</b>	<b>0.45</b>		0.24	0.051	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Boron</b>	<b>2.2 J</b>		2.9	0.41	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Cadmium</b>	<b>0.32</b>		0.12	0.034	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Calcium</b>	<b>3700</b>		12	3.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Chromium</b>	<b>10 B</b>		0.59	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Cobalt</b>	<b>5.4</b>		0.29	0.066	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Copper</b>	<b>10</b>		0.59	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Iron</b>	<b>10000</b>		12	4.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Lead</b>	<b>15</b>		0.29	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Magnesium</b>	<b>1500</b>		5.9	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Manganese</b>	<b>260</b>		0.59	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Nickel</b>	<b>14</b>		0.59	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Potassium</b>	<b>670</b>		29	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Selenium</b>	<b>0.59</b>		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
<b>Sodium</b>	<b>43 J</b>		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
<b>Vanadium</b>	<b>14</b>		0.29	0.086	mg/Kg	☼	12/08/16 15:09	12/09/16 14:12	1
<b>Zinc</b>	<b>110</b>		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
<b>Barium</b>	<b>0.27 J</b>		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
<b>Boron</b>	<b>0.073 J</b>		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
<b>Manganese</b>	<b>0.013</b>	<b>J</b>	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
<b>Zinc</b>	<b>0.092</b>	<b>J</b>	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
<b>Mercury</b>	<b>0.031</b>		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
<b>pH</b>	<b>7.5</b>		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
<b>Arsenic</b>	<b>3.1</b>		0.59	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Barium</b>	<b>62</b>		0.59	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Beryllium</b>	<b>0.41</b>		0.24	0.051	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Boron</b>	<b>1.6</b>	J	2.9	0.41	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Cadmium</b>	<b>0.16</b>		0.12	0.034	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Calcium</b>	<b>2600</b>		12	3.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Chromium</b>	<b>10</b>	B	0.59	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Cobalt</b>	<b>5.5</b>		0.29	0.067	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Copper</b>	<b>9.4</b>		0.59	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Iron</b>	<b>11000</b>		12	4.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Lead</b>	<b>8.6</b>		0.29	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Magnesium</b>	<b>1700</b>		5.9	2.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Manganese</b>	<b>160</b>		0.59	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Nickel</b>	<b>11</b>		0.59	0.16	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Potassium</b>	<b>650</b>		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
<b>Sodium</b>	<b>42</b>	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
<b>Vanadium</b>	<b>13</b>		0.29	0.086	mg/Kg	☼	12/08/16 15:09	12/09/16 14:16	1
<b>Zinc</b>	<b>37</b>		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
<b>Barium</b>	<b>0.22</b>	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
<b>Iron</b>	<b>0.32</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.085</b>		0.041	0.0057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
<b>Anthracene</b>	<b>0.011 J</b>		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
<b>Fluoranthene</b>	<b>0.30</b>		0.041	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
<b>Pyrene</b>	<b>0.24</b>		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
<b>Benzo[a]anthracene</b>	<b>0.11</b>		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
<b>Chrysene</b>	<b>0.17</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.23</b>		0.041	0.0088	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
<b>Benzo[k]fluoranthene</b>	<b>0.081</b>		0.041	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
<b>Benzo[a]pyrene</b>	<b>0.13</b>		0.041	0.0079	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.091</b>		0.041	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
<b>Dibenz(a,h)anthracene</b>	<b>0.027</b>	J	0.041	0.0079	mg/Kg	☼	12/12/16 09:38	12/14/16 02:05	1
<b>Benzo[g,h,i]perylene</b>	<b>0.10</b>		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
<b>Antimony</b>	<b>0.32</b>	J	1.2	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Arsenic</b>	<b>3.6</b>		0.62	0.29	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Barium</b>	<b>82</b>		0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Beryllium</b>	<b>0.48</b>		0.25	0.054	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Boron</b>	<b>2.5</b>	J	3.1	0.43	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Cadmium</b>	<b>0.44</b>		0.12	0.036	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Calcium</b>	<b>54000</b>		120	40	mg/Kg	☼	12/08/16 15:09	12/09/16 23:22	10
<b>Chromium</b>	<b>11</b>	B	0.62	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Cobalt</b>	<b>8.5</b>		0.31	0.070	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Copper</b>	<b>11</b>		0.62	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Iron</b>	<b>11000</b>		12	4.8	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Lead</b>	<b>72</b>		0.31	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Magnesium</b>	<b>1800</b>		6.2	2.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Manganese</b>	<b>530</b>		0.62	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Nickel</b>	<b>17</b>		0.62	0.17	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Potassium</b>	<b>830</b>		31	5.0	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Selenium</b>	<b>0.50</b>	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
<b>Sodium</b>	<b>63</b>		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
<b>Vanadium</b>	<b>14</b>		0.31	0.090	mg/Kg	☼	12/08/16 15:09	12/09/16 14:21	1
<b>Zinc</b>	<b>75</b>		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
<b>Barium</b>	<b>0.34</b>	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
<b>Boron</b>	<b>0.068</b>	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
<b>Lead</b>	<b>0.021</b>		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 18:35	1
<b>Manganese</b>	<b>0.13</b>		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
<b>Zinc</b>	<b>0.082</b>	<b>J</b>	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
<b>Lead</b>	<b>0.11</b>		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
<b>Mercury</b>	<b>0.076</b>		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
<b>pH</b>	<b>8.0</b>		0.2	0.2	SU			12/09/16 19:31	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: 1314V3-01-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: 500-121005-1

**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: 500-121005-1

**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
<b>Arsenic</b>	<b>3.1</b>		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Barium</b>	<b>68</b>		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Beryllium</b>	<b>0.42</b>		0.23	0.049	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Boron</b>	<b>2.3 J</b>		2.8	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Cadmium</b>	<b>0.23</b>		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Calcium</b>	<b>3400</b>		11	3.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Chromium</b>	<b>11 B</b>		0.57	0.097	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Cobalt</b>	<b>5.2</b>		0.28	0.064	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Copper</b>	<b>9.0</b>		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Iron</b>	<b>10000</b>		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Lead</b>	<b>13</b>		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Magnesium</b>	<b>1900</b>		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Manganese</b>	<b>220</b>		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Nickel</b>	<b>12</b>		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Potassium</b>	<b>610</b>		28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Selenium</b>	<b>0.34 J</b>		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
<b>Sodium</b>	<b>540</b>		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
<b>Vanadium</b>	<b>14</b>		0.28	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:25	1
<b>Zinc</b>	<b>41</b>		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
<b>Barium</b>	<b>0.22 J</b>		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
<b>Boron</b>	<b>0.082 J</b>		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: 500-121005-1

**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
<b>Manganese</b>	<b>0.014</b>	<b>J</b>	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
<b>Mercury</b>	<b>0.029</b>		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
<b>pH</b>	<b>8.3</b>		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: 500-121005-1

**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: 500-121005-1

**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: 500-121005-1

**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
<b>Arsenic</b>	<b>3.7</b>		0.57	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Barium</b>	<b>58</b>		0.57	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Beryllium</b>	<b>0.38</b>		0.23	0.049	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Boron</b>	<b>2.1 J</b>		2.8	0.40	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Cadmium</b>	<b>0.20</b>		0.11	0.033	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Calcium</b>	<b>13000</b>		11	3.7	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Chromium</b>	<b>11 B</b>		0.57	0.098	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Cobalt</b>	<b>5.2</b>		0.28	0.064	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Copper</b>	<b>8.4</b>		0.57	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Iron</b>	<b>11000</b>		11	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Lead</b>	<b>7.5</b>		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Magnesium</b>	<b>8500</b>		5.7	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Manganese</b>	<b>210</b>		0.57	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Nickel</b>	<b>13</b>		0.57	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Potassium</b>	<b>550</b>		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
<b>Sodium</b>	<b>840</b>		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
<b>Vanadium</b>	<b>18</b>		0.28	0.083	mg/Kg	☼	12/08/16 15:09	12/09/16 14:30	1
<b>Zinc</b>	<b>38</b>		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
<b>Barium</b>	<b>0.48 J</b>		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
<b>Boron</b>	<b>0.063 J</b>		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: 500-121005-1

**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
<b>Manganese</b>	<b>0.73</b>		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 18:48	1
<b>Nickel</b>	<b>0.011</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.71</b>		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
<b>Mercury</b>	<b>0.026</b>		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
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU			12/09/16 19:38	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: 1314V3-01-B34 (0-7)**

**Lab Sample ID: 500-121005-13**

**Date Collected: 12/05/16 16:15**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.9**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/06/16 13:50	12/07/16 19:27	1
Dibromofluoromethane	103		75 - 120	12/06/16 13:50	12/07/16 19:27	1
1,2-Dichloroethane-d4 (Surr)	113		69 - 134	12/06/16 13:50	12/07/16 19:27	1
Toluene-d8 (Surr)	99		75 - 123	12/06/16 13:50	12/07/16 19:27	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (0-7)**

**Lab Sample ID: 500-121005-13**

**Date Collected: 12/05/16 16:15**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Phenanthrene</b>	<b>0.050</b>		0.037	0.0052	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Anthracene</b>	<b>0.011 J</b>		0.037	0.0063	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Fluoranthene</b>	<b>0.093</b>		0.037	0.0070	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Pyrene</b>	<b>0.091</b>		0.037	0.0074	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Benzo[a]anthracene</b>	<b>0.050</b>		0.037	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (0-7)**

**Lab Sample ID: 500-121005-13**

Date Collected: 12/05/16 16:15

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.056</b>		0.037	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Benzo[b]fluoranthene</b>	<b>0.079</b>		0.037	0.0081	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Benzo[k]fluoranthene</b>	<b>0.033</b>	J	0.037	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Benzo[a]pyrene</b>	<b>0.055</b>		0.037	0.0073	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.025</b>	J	0.037	0.0097	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0075</b>	J	0.037	0.0072	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Benzo[g,h,i]perylene</b>	<b>0.028</b>	J	0.037	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/12/16 09:38	12/14/16 02:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorophenol	87		40 - 130				12/12/16 09:38	12/14/16 02:34	1
Phenol-d5	88		36 - 123				12/12/16 09:38	12/14/16 02:34	1
Nitrobenzene-d5	77		33 - 124				12/12/16 09:38	12/14/16 02:34	1
2-Fluorobiphenyl	75		42 - 115				12/12/16 09:38	12/14/16 02:34	1
2,4,6-Tribromophenol	70		25 - 130				12/12/16 09:38	12/14/16 02:34	1
Terphenyl-d14	97		25 - 150				12/12/16 09:38	12/14/16 02:34	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Arsenic</b>	<b>4.8</b>		0.54	0.25	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Barium</b>	<b>68</b>		0.54	0.099	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Beryllium</b>	<b>0.43</b>		0.22	0.047	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Boron</b>	<b>3.7</b>		2.7	0.38	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Cadmium</b>	<b>0.27</b>		0.11	0.031	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Calcium</b>	<b>26000</b>		11	3.5	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Chromium</b>	<b>10</b>	B	0.54	0.093	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Cobalt</b>	<b>7.1</b>		0.27	0.061	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Copper</b>	<b>33</b>		0.54	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Iron</b>	<b>12000</b>		11	4.2	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Lead</b>	<b>37</b>		0.27	0.13	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Magnesium</b>	<b>11000</b>		5.4	2.2	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Manganese</b>	<b>330</b>		0.54	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Nickel</b>	<b>16</b>		0.54	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Potassium</b>	<b>670</b>		27	4.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Selenium</b>	<b>0.68</b>		0.54	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Sodium</b>	<b>620</b>		54	7.1	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
Thallium	<0.54		0.54	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Vanadium</b>	<b>18</b>		0.27	0.079	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1
<b>Zinc</b>	<b>60</b>		1.1	0.34	mg/Kg	☼	12/08/16 15:09	12/09/16 14:34	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>1.0</b>		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 18:55	1
<b>Boron</b>	<b>0.082</b>	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 18:55	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (0-7)**

**Lab Sample ID: 500-121005-13**

**Date Collected: 12/05/16 16:15**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0026</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Iron	<0.40		0.40	0.20	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
<b>Manganese</b>	<b>3.7</b>		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
<b>Nickel</b>	<b>0.025</b>		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
Silver	<0.025		0.025	0.010	mg/L	-	12/08/16 14:21	12/10/16 18:55	1
<b>Zinc</b>	<b>0.069</b>	<b>J</b>	0.50	0.020	mg/L	-	12/08/16 14:21	12/10/16 18:55	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.76</b>		0.025	0.010	mg/L	-	12/08/16 14:20	12/11/16 04:12	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/08/16 14:21	12/09/16 17:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/08/16 14:21	12/09/16 17:26	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/08/16 12:45	12/09/16 10:02	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.070</b>		0.018	0.0093	mg/Kg	☼	12/07/16 14:45	12/08/16 11:36	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU	-		12/09/16 19:42	1



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (7-14)**

**Lab Sample ID: 500-121005-14**

**Date Collected: 12/05/16 16:20**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.4**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/06/16 13:50	12/07/16 19:52	1
Dibromofluoromethane	103		75 - 120	12/06/16 13:50	12/07/16 19:52	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/06/16 13:50	12/07/16 19:52	1
Toluene-d8 (Surr)	102		75 - 123	12/06/16 13:50	12/07/16 19:52	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (7-14)**

**Lab Sample ID: 500-121005-14**

**Date Collected: 12/05/16 16:20**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Phenanthrene</b>	<b>0.056</b>		0.038	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Anthracene</b>	<b>0.0068 J</b>		0.038	0.0063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Fluoranthene</b>	<b>0.10</b>		0.038	0.0070	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Pyrene</b>	<b>0.078</b>		0.038	0.0076	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Benzo[a]anthracene</b>	<b>0.036 J</b>		0.038	0.0051	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (7-14)**

**Lab Sample ID: 500-121005-14**

Date Collected: 12/05/16 16:20

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 87.4

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.039</b>		0.038	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Benzo[b]fluoranthene</b>	<b>0.043</b>		0.038	0.0082	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Benzo[k]fluoranthene</b>	<b>0.015 J</b>		0.038	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Benzo[a]pyrene</b>	<b>0.030 J</b>		0.038	0.0074	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.018 J</b>		0.038	0.0099	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
<b>Benzo[g,h,i]perylene</b>	<b>0.020 J</b>		0.038	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/12/16 09:38	12/14/16 00:08	1
Phenol-d5	98		36 - 123	12/12/16 09:38	12/14/16 00:08	1
Nitrobenzene-d5	85		33 - 124	12/12/16 09:38	12/14/16 00:08	1
2-Fluorobiphenyl	84		42 - 115	12/12/16 09:38	12/14/16 00:08	1
2,4,6-Tribromophenol	47		25 - 130	12/12/16 09:38	12/14/16 00:08	1
Terphenyl-d14	104		25 - 150	12/12/16 09:38	12/14/16 00:08	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Arsenic</b>	<b>4.0</b>		0.56	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Barium</b>	<b>55</b>		0.56	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Beryllium</b>	<b>0.40</b>		0.22	0.048	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Boron</b>	<b>3.3</b>		2.8	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Cadmium</b>	<b>0.21</b>		0.11	0.032	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Calcium</b>	<b>61000</b>		110	36	mg/Kg	☼	12/08/16 15:09	12/09/16 23:26	10
<b>Chromium</b>	<b>10 B</b>		0.56	0.096	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Cobalt</b>	<b>7.0</b>		0.28	0.063	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Copper</b>	<b>9.6</b>		0.56	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Iron</b>	<b>12000</b>		11	4.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Lead</b>	<b>8.8</b>		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Magnesium</b>	<b>21000</b>		5.6	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Manganese</b>	<b>360</b>		0.56	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Nickel</b>	<b>15</b>		0.56	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Potassium</b>	<b>720</b>		28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Selenium</b>	<b>0.30 J</b>		0.56	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Sodium</b>	<b>120</b>		56	7.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Vanadium</b>	<b>16</b>		0.28	0.081	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1
<b>Zinc</b>	<b>32</b>		1.1	0.35	mg/Kg	☼	12/08/16 15:09	12/09/16 14:39	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.53</b>		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 19:02	1
<b>Boron</b>	<b>0.065 J</b>		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:02	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (7-14)**

**Lab Sample ID: 500-121005-14**

**Date Collected: 12/05/16 16:20**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.4**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 19:02	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 19:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 19:02	1
Manganese	1.1		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Nickel	0.010	J	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 19:02	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:02	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 19:02	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.21		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 04:19	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 17:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:30	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/08/16 12:45	12/09/16 10:03	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043		0.017	0.0089	mg/Kg	☼	12/07/16 14:45	12/08/16 12:06	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			12/09/16 19:45	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Lab Sample ID: 500-121005-15**

Date Collected: 12/05/16 16:24

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 86.6

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	12/06/16 13:50	12/07/16 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120	12/06/16 13:50	12/07/16 20:16	1
Dibromofluoromethane	103		75 - 120	12/06/16 13:50	12/07/16 20:16	1
1,2-Dichloroethane-d4 (Surr)	106		69 - 134	12/06/16 13:50	12/07/16 20:16	1
Toluene-d8 (Surr)	103		75 - 123	12/06/16 13:50	12/07/16 20:16	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Lab Sample ID: 500-121005-15**

**Date Collected: 12/05/16 16:24**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 86.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Lab Sample ID: 500-121005-15**

**Date Collected: 12/05/16 16:24**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 86.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/12/16 09:38	12/14/16 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		40 - 130	12/12/16 09:38	12/14/16 00:38	1
Phenol-d5	81		36 - 123	12/12/16 09:38	12/14/16 00:38	1
Nitrobenzene-d5	71		33 - 124	12/12/16 09:38	12/14/16 00:38	1
2-Fluorobiphenyl	71		42 - 115	12/12/16 09:38	12/14/16 00:38	1
2,4,6-Tribromophenol	64		25 - 130	12/12/16 09:38	12/14/16 00:38	1
Terphenyl-d14	87		25 - 150	12/12/16 09:38	12/14/16 00:38	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J F1	1.1	0.23	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Arsenic	3.0	F1 F2	0.56	0.26	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Barium	48		0.56	0.10	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Beryllium	0.46		0.22	0.048	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Boron	2.5	J F1	2.8	0.39	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Cadmium	0.15		0.11	0.032	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Calcium	30000		11	3.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Chromium	11	B	0.56	0.096	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Cobalt	6.8	F1 F2	0.28	0.063	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Copper	11		0.56	0.12	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Iron	12000		11	4.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Lead	8.1		0.28	0.14	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Magnesium	15000		5.6	2.3	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Manganese	250		0.56	0.11	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Nickel	17	F1 F2	0.56	0.15	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Potassium	750	F1	28	4.6	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Selenium	0.41	J F1	0.56	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Silver	<0.28	F1	0.28	0.065	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Sodium	76		56	7.4	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Vanadium	17		0.28	0.082	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1
Zinc	32		1.1	0.35	mg/Kg	☼	12/08/16 15:09	12/09/16 14:51	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 19:08	1
Boron	0.051	J	0.50	0.050	mg/L		12/08/16 14:21	12/10/16 19:08	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Lab Sample ID: 500-121005-15**

**Date Collected: 12/05/16 16:24**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 86.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 19:08	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
<b>Cobalt</b>	<b>0.016</b>	<b>J</b>	0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
<b>Iron</b>	<b>2.7</b>		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 19:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 19:08	1
<b>Manganese</b>	<b>3.9</b>		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
<b>Nickel</b>	<b>0.033</b>		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 19:08	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 19:08	1
<b>Zinc</b>	<b>0.023</b>	<b>J</b>	0.50	0.020	mg/L		12/08/16 14:21	12/10/16 19:08	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.35</b>		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 04:25	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/08/16 14:21	12/09/16 17:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 17:33	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/08/16 12:45	12/09/16 10:05	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.013</b>	<b>J</b>	0.017	0.0089	mg/Kg	☼	12/07/16 14:45	12/08/16 12:09	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU			12/09/16 19:49	1



# Definitions/Glossary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## 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.
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)

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## GC/MS VOA

### Analysis Batch: 363925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	8260B	363956
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	8260B	363956
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	8260B	363956
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	8260B	363956
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	8260B	363956
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	8260B	363956
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	8260B	363956
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	8260B	363956
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	8260B	363956
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	8260B	363956
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	8260B	363956
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	8260B	363956
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	8260B	363956
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	8260B	363956
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	8260B	363956
MB 500-363925/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-363925/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-363925/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Prep Batch: 363956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	5035	
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	5035	
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	5035	
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	5035	
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	5035	
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	5035	
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	5035	
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	5035	
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	5035	
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	5035	
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	5035	
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	5035	
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	5035	
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	5035	
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	5035	

## GC/MS Semi VOA

### Prep Batch: 364629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	3541	
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	3541	
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	3541	
500-121005-3 - DL	1314V3-60-B06 (0-6)	Total/NA	Solid	3541	
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	3541	
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	3541	
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	3541	
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	3541	
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	3541	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 364629 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	3541	
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	3541	
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	3541	
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	3541	
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	3541	
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	3541	
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	3541	
MB 500-364629/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-364629/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-121005-3 MS	1314V3-60-B06 (0-6)	Total/NA	Solid	3541	
500-121005-3 MSD	1314V3-60-B06 (0-6)	Total/NA	Solid	3541	

### Analysis Batch: 364920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	8270D	364629
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	8270D	364629
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	8270D	364629
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	8270D	364629
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	8270D	364629
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	8270D	364629
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	8270D	364629
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	8270D	364629
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	8270D	364629
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	8270D	364629
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	8270D	364629
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	8270D	364629
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	8270D	364629
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	8270D	364629
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	8270D	364629
MB 500-364629/1-A	Method Blank	Total/NA	Solid	8270D	364629
LCS 500-364629/2-A	Lab Control Sample	Total/NA	Solid	8270D	364629
500-121005-3 MS	1314V3-60-B06 (0-6)	Total/NA	Solid	8270D	364629
500-121005-3 MSD	1314V3-60-B06 (0-6)	Total/NA	Solid	8270D	364629

### Analysis Batch: 365062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-3 - DL	1314V3-60-B06 (0-6)	Total/NA	Solid	8270D	364629

## Metals

### Leach Batch: 364005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-7	1314V3-60-B04 (0-5)	SPLP East	Solid	1312	
500-121005-10	1314V3-60-B02 (0-7)	SPLP East	Solid	1312	
500-121005-12	1314V3-01-B11 (8-15)	SPLP East	Solid	1312	
500-121005-13	1314V3-01-B34 (0-7)	SPLP East	Solid	1312	
500-121005-14	1314V3-01-B34 (7-14)	SPLP East	Solid	1312	
500-121005-15	1314V3-01-B34 (14-20)	SPLP East	Solid	1312	
LB 500-364005/1-B	Method Blank	SPLP East	Solid	1312	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Metals (Continued)

### Leach Batch: 364018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	TCLP	Solid	1311	
500-121005-2	1314V3-60-B01 (6-11)	TCLP	Solid	1311	
500-121005-3	1314V3-60-B06 (0-6)	TCLP	Solid	1311	
500-121005-4	1314V3-60-B06 (6-12)	TCLP	Solid	1311	
500-121005-5	1314V3-60-B05 (0-6)	TCLP	Solid	1311	
500-121005-6	1314V3-60-B05 (6-12)	TCLP	Solid	1311	
500-121005-7	1314V3-60-B04 (0-5)	TCLP	Solid	1311	
500-121005-8	1314V3-60-B03 (0-4)	TCLP	Solid	1311	
500-121005-9	1314V3-60-B03 (4-9)	TCLP	Solid	1311	
500-121005-10	1314V3-60-B02 (0-7)	TCLP	Solid	1311	
500-121005-11	1314V3-01-B11 (0-8)	TCLP	Solid	1311	
500-121005-12	1314V3-01-B11 (8-15)	TCLP	Solid	1311	
500-121005-13	1314V3-01-B34 (0-7)	TCLP	Solid	1311	
500-121005-14	1314V3-01-B34 (7-14)	TCLP	Solid	1311	
500-121005-15	1314V3-01-B34 (14-20)	TCLP	Solid	1311	
LB 500-364018/1-B	Method Blank	TCLP	Solid	1311	
LB 500-364018/1-C	Method Blank	TCLP	Solid	1311	
500-121005-1 MS	1314V3-60-B01 (0-6)	TCLP	Solid	1311	
500-121005-15 MS	1314V3-01-B34 (14-20)	TCLP	Solid	1311	
500-121005-1 DU	1314V3-60-B01 (0-6)	TCLP	Solid	1311	
500-121005-15 DU	1314V3-01-B34 (14-20)	TCLP	Solid	1311	

### Prep Batch: 364021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	7471B	
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	7471B	
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	7471B	
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	7471B	
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	7471B	
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	7471B	
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	7471B	
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	7471B	
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	7471B	
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	7471B	
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	7471B	
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	7471B	
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	7471B	
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	7471B	
MB 500-364021/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-364021/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-121005-1 MS	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	
500-121005-1 MSD	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	
500-121005-1 DU	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	

### Analysis Batch: 364194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	364021
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	7471B	364021
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	7471B	364021
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	7471B	364021

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Metals (Continued)

### Analysis Batch: 364194 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	7471B	364021
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	7471B	364021
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	7471B	364021
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	7471B	364021
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	7471B	364021
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	7471B	364021
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	7471B	364021
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	7471B	364021
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	7471B	364021
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	7471B	364021
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	7471B	364021
MB 500-364021/12-A	Method Blank	Total/NA	Solid	7471B	364021
LCS 500-364021/13-A	Lab Control Sample	Total/NA	Solid	7471B	364021
500-121005-1 MS	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	364021
500-121005-1 MSD	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	364021
500-121005-1 DU	1314V3-60-B01 (0-6)	Total/NA	Solid	7471B	364021

### Prep Batch: 364199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	TCLP	Solid	7470A	364018
500-121005-2	1314V3-60-B01 (6-11)	TCLP	Solid	7470A	364018
500-121005-3	1314V3-60-B06 (0-6)	TCLP	Solid	7470A	364018
500-121005-4	1314V3-60-B06 (6-12)	TCLP	Solid	7470A	364018
500-121005-5	1314V3-60-B05 (0-6)	TCLP	Solid	7470A	364018
500-121005-6	1314V3-60-B05 (6-12)	TCLP	Solid	7470A	364018
500-121005-7	1314V3-60-B04 (0-5)	TCLP	Solid	7470A	364018
500-121005-8	1314V3-60-B03 (0-4)	TCLP	Solid	7470A	364018
500-121005-9	1314V3-60-B03 (4-9)	TCLP	Solid	7470A	364018
500-121005-10	1314V3-60-B02 (0-7)	TCLP	Solid	7470A	364018
500-121005-11	1314V3-01-B11 (0-8)	TCLP	Solid	7470A	364018
500-121005-12	1314V3-01-B11 (8-15)	TCLP	Solid	7470A	364018
500-121005-13	1314V3-01-B34 (0-7)	TCLP	Solid	7470A	364018
500-121005-14	1314V3-01-B34 (7-14)	TCLP	Solid	7470A	364018
500-121005-15	1314V3-01-B34 (14-20)	TCLP	Solid	7470A	364018
LB 500-364018/1-B	Method Blank	TCLP	Solid	7470A	364018
MB 500-364199/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-364199/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-121005-1 MS	1314V3-60-B01 (0-6)	TCLP	Solid	7470A	364018
500-121005-1 DU	1314V3-60-B01 (0-6)	TCLP	Solid	7470A	364018

### Prep Batch: 364209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-7	1314V3-60-B04 (0-5)	SPLP East	Solid	3010A	364005
500-121005-10	1314V3-60-B02 (0-7)	SPLP East	Solid	3010A	364005
500-121005-12	1314V3-01-B11 (8-15)	SPLP East	Solid	3010A	364005
500-121005-13	1314V3-01-B34 (0-7)	SPLP East	Solid	3010A	364005
500-121005-14	1314V3-01-B34 (7-14)	SPLP East	Solid	3010A	364005
500-121005-15	1314V3-01-B34 (14-20)	SPLP East	Solid	3010A	364005
LB 500-364005/1-B	Method Blank	SPLP East	Solid	3010A	364005
LCS 500-364209/2-A	Lab Control Sample	Total/NA	Solid	3010A	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Metals (Continued)

### Prep Batch: 364210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	TCLP	Solid	3010A	364018
500-121005-2	1314V3-60-B01 (6-11)	TCLP	Solid	3010A	364018
500-121005-3	1314V3-60-B06 (0-6)	TCLP	Solid	3010A	364018
500-121005-4	1314V3-60-B06 (6-12)	TCLP	Solid	3010A	364018
500-121005-5	1314V3-60-B05 (0-6)	TCLP	Solid	3010A	364018
500-121005-6	1314V3-60-B05 (6-12)	TCLP	Solid	3010A	364018
500-121005-7	1314V3-60-B04 (0-5)	TCLP	Solid	3010A	364018
500-121005-8	1314V3-60-B03 (0-4)	TCLP	Solid	3010A	364018
500-121005-9	1314V3-60-B03 (4-9)	TCLP	Solid	3010A	364018
500-121005-10	1314V3-60-B02 (0-7)	TCLP	Solid	3010A	364018
500-121005-11	1314V3-01-B11 (0-8)	TCLP	Solid	3010A	364018
500-121005-12	1314V3-01-B11 (8-15)	TCLP	Solid	3010A	364018
500-121005-13	1314V3-01-B34 (0-7)	TCLP	Solid	3010A	364018
500-121005-14	1314V3-01-B34 (7-14)	TCLP	Solid	3010A	364018
500-121005-15	1314V3-01-B34 (14-20)	TCLP	Solid	3010A	364018
LB 500-364018/1-C	Method Blank	TCLP	Solid	3010A	364018
LCS 500-364210/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-121005-15 MS	1314V3-01-B34 (14-20)	TCLP	Solid	3010A	364018
500-121005-15 DU	1314V3-01-B34 (14-20)	TCLP	Solid	3010A	364018

### Prep Batch: 364230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	3050B	
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	3050B	
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	3050B	
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	3050B	
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	3050B	
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	3050B	
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	3050B	
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	3050B	
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	3050B	
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	3050B	
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	3050B	
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	3050B	
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	3050B	
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	3050B	
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	3050B	
MB 500-364230/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-364230/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-121005-15 MS	1314V3-01-B34 (14-20)	Total/NA	Solid	3050B	
500-121005-15 MSD	1314V3-01-B34 (14-20)	Total/NA	Solid	3050B	
500-121005-15 DU	1314V3-01-B34 (14-20)	Total/NA	Solid	3050B	

### Analysis Batch: 364397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	TCLP	Solid	7470A	364199
500-121005-2	1314V3-60-B01 (6-11)	TCLP	Solid	7470A	364199
500-121005-3	1314V3-60-B06 (0-6)	TCLP	Solid	7470A	364199
500-121005-4	1314V3-60-B06 (6-12)	TCLP	Solid	7470A	364199
500-121005-5	1314V3-60-B05 (0-6)	TCLP	Solid	7470A	364199
500-121005-6	1314V3-60-B05 (6-12)	TCLP	Solid	7470A	364199

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Metals (Continued)

### Analysis Batch: 364397 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-7	1314V3-60-B04 (0-5)	TCLP	Solid	7470A	364199
500-121005-8	1314V3-60-B03 (0-4)	TCLP	Solid	7470A	364199
500-121005-9	1314V3-60-B03 (4-9)	TCLP	Solid	7470A	364199
500-121005-10	1314V3-60-B02 (0-7)	TCLP	Solid	7470A	364199
500-121005-11	1314V3-01-B11 (0-8)	TCLP	Solid	7470A	364199
500-121005-12	1314V3-01-B11 (8-15)	TCLP	Solid	7470A	364199
500-121005-13	1314V3-01-B34 (0-7)	TCLP	Solid	7470A	364199
500-121005-14	1314V3-01-B34 (7-14)	TCLP	Solid	7470A	364199
500-121005-15	1314V3-01-B34 (14-20)	TCLP	Solid	7470A	364199
LB 500-364018/1-B	Method Blank	TCLP	Solid	7470A	364199
MB 500-364199/12-A	Method Blank	Total/NA	Solid	7470A	364199
LCS 500-364199/13-A	Lab Control Sample	Total/NA	Solid	7470A	364199
500-121005-1 MS	1314V3-60-B01 (0-6)	TCLP	Solid	7470A	364199
500-121005-1 DU	1314V3-60-B01 (0-6)	TCLP	Solid	7470A	364199

### Analysis Batch: 364449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	6010B	364230
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	6010B	364230
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	6010B	364230
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	6010B	364230
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	6010B	364230
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	6010B	364230
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	6010B	364230
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	6010B	364230
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	6010B	364230
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	6010B	364230
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	6010B	364230
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	6010B	364230
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	6010B	364230
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	6010B	364230
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	6010B	364230
MB 500-364230/1-A	Method Blank	Total/NA	Solid	6010B	364230
LCS 500-364230/2-A	Lab Control Sample	Total/NA	Solid	6010B	364230
500-121005-15 MS	1314V3-01-B34 (14-20)	Total/NA	Solid	6010B	364230
500-121005-15 MSD	1314V3-01-B34 (14-20)	Total/NA	Solid	6010B	364230
500-121005-15 DU	1314V3-01-B34 (14-20)	Total/NA	Solid	6010B	364230

### Analysis Batch: 364518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	TCLP	Solid	6010B	364210
500-121005-2	1314V3-60-B01 (6-11)	TCLP	Solid	6010B	364210
500-121005-3	1314V3-60-B06 (0-6)	TCLP	Solid	6010B	364210
500-121005-4	1314V3-60-B06 (6-12)	TCLP	Solid	6010B	364210
500-121005-5	1314V3-60-B05 (0-6)	TCLP	Solid	6010B	364210
500-121005-6	1314V3-60-B05 (6-12)	TCLP	Solid	6010B	364210
500-121005-7	1314V3-60-B04 (0-5)	SPLP East	Solid	6010B	364209
500-121005-7	1314V3-60-B04 (0-5)	TCLP	Solid	6010B	364210
500-121005-8	1314V3-60-B03 (0-4)	TCLP	Solid	6010B	364210
500-121005-9	1314V3-60-B03 (4-9)	TCLP	Solid	6010B	364210
500-121005-10	1314V3-60-B02 (0-7)	SPLP East	Solid	6010B	364209

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Metals (Continued)

### Analysis Batch: 364518 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-10	1314V3-60-B02 (0-7)	TCLP	Solid	6010B	364210
500-121005-11	1314V3-01-B11 (0-8)	TCLP	Solid	6010B	364210
500-121005-12	1314V3-01-B11 (8-15)	SPLP East	Solid	6010B	364209
500-121005-12	1314V3-01-B11 (8-15)	TCLP	Solid	6010B	364210
500-121005-13	1314V3-01-B34 (0-7)	SPLP East	Solid	6010B	364209
500-121005-13	1314V3-01-B34 (0-7)	TCLP	Solid	6010B	364210
500-121005-14	1314V3-01-B34 (7-14)	SPLP East	Solid	6010B	364209
500-121005-14	1314V3-01-B34 (7-14)	TCLP	Solid	6010B	364210
500-121005-15	1314V3-01-B34 (14-20)	SPLP East	Solid	6010B	364209
500-121005-15	1314V3-01-B34 (14-20)	TCLP	Solid	6010B	364210
LB 500-364005/1-B	Method Blank	SPLP East	Solid	6010B	364209
LB 500-364018/1-C	Method Blank	TCLP	Solid	6010B	364210
LCS 500-364209/2-A	Lab Control Sample	Total/NA	Solid	6010B	364209
LCS 500-364210/2-A	Lab Control Sample	Total/NA	Solid	6010B	364210
500-121005-15 MS	1314V3-01-B34 (14-20)	TCLP	Solid	6010B	364210
500-121005-15 DU	1314V3-01-B34 (14-20)	TCLP	Solid	6010B	364210

### Analysis Batch: 364522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	6010B	364230
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	6010B	364230
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	6010B	364230

### Analysis Batch: 364634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	TCLP	Solid	6020A	364210
500-121005-2	1314V3-60-B01 (6-11)	TCLP	Solid	6020A	364210
500-121005-3	1314V3-60-B06 (0-6)	TCLP	Solid	6020A	364210
500-121005-4	1314V3-60-B06 (6-12)	TCLP	Solid	6020A	364210
500-121005-5	1314V3-60-B05 (0-6)	TCLP	Solid	6020A	364210
500-121005-6	1314V3-60-B05 (6-12)	TCLP	Solid	6020A	364210
500-121005-7	1314V3-60-B04 (0-5)	TCLP	Solid	6020A	364210
500-121005-8	1314V3-60-B03 (0-4)	TCLP	Solid	6020A	364210
500-121005-9	1314V3-60-B03 (4-9)	TCLP	Solid	6020A	364210
500-121005-10	1314V3-60-B02 (0-7)	TCLP	Solid	6020A	364210
500-121005-11	1314V3-01-B11 (0-8)	TCLP	Solid	6020A	364210
500-121005-12	1314V3-01-B11 (8-15)	TCLP	Solid	6020A	364210
500-121005-13	1314V3-01-B34 (0-7)	TCLP	Solid	6020A	364210
500-121005-14	1314V3-01-B34 (7-14)	TCLP	Solid	6020A	364210
500-121005-15	1314V3-01-B34 (14-20)	TCLP	Solid	6020A	364210
LB 500-364018/1-C	Method Blank	TCLP	Solid	6020A	364210
LCS 500-364210/2-A	Lab Control Sample	Total/NA	Solid	6020A	364210
500-121005-15 MS	1314V3-01-B34 (14-20)	TCLP	Solid	6020A	364210
500-121005-15 DU	1314V3-01-B34 (14-20)	TCLP	Solid	6020A	364210

## General Chemistry

### Analysis Batch: 363835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## General Chemistry (Continued)

### Analysis Batch: 363835 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	Moisture	
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	Moisture	
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	Moisture	
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	Moisture	
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	Moisture	
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	Moisture	
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	Moisture	
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	Moisture	
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	Moisture	
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	Moisture	
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	Moisture	
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	Moisture	
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	Moisture	
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	Moisture	
500-121005-1 DU	1314V3-60-B01 (0-6)	Total/NA	Solid	Moisture	

### Analysis Batch: 364502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121005-1	1314V3-60-B01 (0-6)	Total/NA	Solid	9045D	
500-121005-2	1314V3-60-B01 (6-11)	Total/NA	Solid	9045D	
500-121005-3	1314V3-60-B06 (0-6)	Total/NA	Solid	9045D	
500-121005-4	1314V3-60-B06 (6-12)	Total/NA	Solid	9045D	
500-121005-5	1314V3-60-B05 (0-6)	Total/NA	Solid	9045D	
500-121005-6	1314V3-60-B05 (6-12)	Total/NA	Solid	9045D	
500-121005-7	1314V3-60-B04 (0-5)	Total/NA	Solid	9045D	
500-121005-8	1314V3-60-B03 (0-4)	Total/NA	Solid	9045D	
500-121005-9	1314V3-60-B03 (4-9)	Total/NA	Solid	9045D	
500-121005-10	1314V3-60-B02 (0-7)	Total/NA	Solid	9045D	
500-121005-11	1314V3-01-B11 (0-8)	Total/NA	Solid	9045D	
500-121005-12	1314V3-01-B11 (8-15)	Total/NA	Solid	9045D	
500-121005-13	1314V3-01-B34 (0-7)	Total/NA	Solid	9045D	
500-121005-14	1314V3-01-B34 (7-14)	Total/NA	Solid	9045D	
500-121005-15	1314V3-01-B34 (14-20)	Total/NA	Solid	9045D	
500-121005-1 DU	1314V3-60-B01 (0-6)	Total/NA	Solid	9045D	

# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (70-120)	DBFM (75-120)	12DCE (69-134)	TOL (75-123)
500-121005-1	1314V3-60-B01 (0-6)	106	103	109	101
500-121005-2	1314V3-60-B01 (6-11)	105	99	106	101
500-121005-3	1314V3-60-B06 (0-6)	110	98	104	104
500-121005-4	1314V3-60-B06 (6-12)	108	98	104	102
500-121005-5	1314V3-60-B05 (0-6)	106	98	103	104
500-121005-6	1314V3-60-B05 (6-12)	105	99	107	104
500-121005-7	1314V3-60-B04 (0-5)	109	100	106	103
500-121005-8	1314V3-60-B03 (0-4)	110	98	109	105
500-121005-9	1314V3-60-B03 (4-9)	108	100	105	101
500-121005-10	1314V3-60-B02 (0-7)	103	100	106	102
500-121005-11	1314V3-01-B11 (0-8)	109	100	109	101
500-121005-12	1314V3-01-B11 (8-15)	107	100	108	103
500-121005-13	1314V3-01-B34 (0-7)	105	103	113	99
500-121005-14	1314V3-01-B34 (7-14)	106	103	109	102
500-121005-15	1314V3-01-B34 (14-20)	108	103	106	103
LCS 500-363925/4	Lab Control Sample	102	93	95	105
LCSD 500-363925/5	Lab Control Sample Dup	100	96	100	103
MB 500-363925/7	Method Blank	108	94	100	103

### 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

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)
500-121005-1	1314V3-60-B01 (0-6)	104	93	88	87	86	101
500-121005-2	1314V3-60-B01 (6-11)	96	89	84	83	93	101
500-121005-3	1314V3-60-B06 (0-6)	20 X	79	70	75	32	91
500-121005-3 - DL	1314V3-60-B06 (0-6)	40	78	67	80	35	96
500-121005-3 MS	1314V3-60-B06 (0-6)	23 X	77	73	73	43	112
500-121005-3 MSD	1314V3-60-B06 (0-6)	38 X	69	69	68	34	97
500-121005-4	1314V3-60-B06 (6-12)	86	82	78	77	88	95
500-121005-5	1314V3-60-B05 (0-6)	92	82	75	75	79	92
500-121005-6	1314V3-60-B05 (6-12)	92	87	75	75	64	94
500-121005-7	1314V3-60-B04 (0-5)	90	88	76	81	99	128
500-121005-8	1314V3-60-B03 (0-4)	93	83	79	79	47	97
500-121005-9	1314V3-60-B03 (4-9)	78	71	66	66	23 X	84
500-121005-10	1314V3-60-B02 (0-7)	88	82	72	72	59	88
500-121005-11	1314V3-01-B11 (0-8)	84	79	70	72	32	87
500-121005-12	1314V3-01-B11 (8-15)	89	82	76	76	39	94
500-121005-13	1314V3-01-B34 (0-7)	87	88	77	75	70	97
500-121005-14	1314V3-01-B34 (7-14)	99	98	85	84	47	104
500-121005-15	1314V3-01-B34 (14-20)	83	81	71	71	64	87

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# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## 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)
LCS 500-364629/2-A	Lab Control Sample	101	92	91	88	101	98
MB 500-364629/1-A	Method Blank	103	101	91	91	70	102

### 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: 500-121005-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-363925/7**

**Matrix: Solid**

**Analysis Batch: 363925**

**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			12/07/16 11:34	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/07/16 11:34	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/07/16 11:34	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/07/16 11:34	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/07/16 11:34	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/07/16 11:34	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/07/16 11:34	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/07/16 11:34	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/07/16 11:34	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/07/16 11:34	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 11:34	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/07/16 11:34	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/07/16 11:34	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/07/16 11:34	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/07/16 11:34	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 11:34	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/07/16 11:34	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/07/16 11:34	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/07/16 11:34	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/07/16 11:34	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/07/16 11:34	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/07/16 11:34	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/07/16 11:34	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/07/16 11:34	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/07/16 11:34	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/07/16 11:34	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/07/16 11:34	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/07/16 11:34	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/07/16 11:34	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/07/16 11:34	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/07/16 11:34	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/07/16 11:34	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/07/16 11:34	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/07/16 11:34	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/07/16 11:34	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/07/16 11:34	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/07/16 11:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120		12/07/16 11:34	1
Dibromofluoromethane	94		75 - 120		12/07/16 11:34	1
1,2-Dichloroethane-d4 (Surr)	100		69 - 134		12/07/16 11:34	1
Toluene-d8 (Surr)	103		75 - 123		12/07/16 11:34	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-363925/4**

**Matrix: Solid**

**Analysis Batch: 363925**

**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	0.0443		mg/Kg		89	40 - 148
Benzene	0.0500	0.0469		mg/Kg		94	70 - 120
Bromodichloromethane	0.0500	0.0482		mg/Kg		96	67 - 120
Bromoform	0.0500	0.0470		mg/Kg		94	50 - 129
Bromomethane	0.0500	0.0434		mg/Kg		87	50 - 134
2-Butanone (MEK)	0.0500	0.0478		mg/Kg		96	47 - 138
Carbon disulfide	0.0500	0.0498		mg/Kg		100	67 - 133
Carbon tetrachloride	0.0500	0.0468		mg/Kg		94	65 - 123
Chlorobenzene	0.0500	0.0486		mg/Kg		97	70 - 120
Chloroethane	0.0500	0.0608		mg/Kg		122	40 - 150
Chloroform	0.0500	0.0479		mg/Kg		96	70 - 120
Chloromethane	0.0500	0.0435		mg/Kg		87	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0471		mg/Kg		94	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0497		mg/Kg		99	70 - 120
Dibromochloromethane	0.0500	0.0490		mg/Kg		98	68 - 120
1,1-Dichloroethane	0.0500	0.0477		mg/Kg		95	70 - 125
1,2-Dichloroethane	0.0500	0.0490		mg/Kg		98	65 - 126
1,1-Dichloroethene	0.0500	0.0476		mg/Kg		95	70 - 122
1,2-Dichloropropane	0.0500	0.0463		mg/Kg		93	70 - 126
Ethylbenzene	0.0500	0.0491		mg/Kg		98	70 - 120
2-Hexanone	0.0500	0.0481		mg/Kg		96	51 - 139
Methylene Chloride	0.0500	0.0482		mg/Kg		96	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0487		mg/Kg		97	51 - 141
Methyl tert-butyl ether	0.0500	0.0456		mg/Kg		91	70 - 121
Styrene	0.0500	0.0487		mg/Kg		97	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0532		mg/Kg		106	70 - 125
Tetrachloroethene	0.0500	0.0495		mg/Kg		99	70 - 122
Toluene	0.0500	0.0496		mg/Kg		99	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0475		mg/Kg		95	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0497		mg/Kg		99	70 - 121
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 120
1,1,2-Trichloroethane	0.0500	0.0498		mg/Kg		100	70 - 120
Trichloroethene	0.0500	0.0467		mg/Kg		93	70 - 124
Vinyl acetate	0.0500	0.0474		mg/Kg		95	40 - 150
Vinyl chloride	0.0500	0.0455		mg/Kg		91	64 - 125
Xylenes, Total	0.100	0.100		mg/Kg		100	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 120
Dibromofluoromethane	93		75 - 120
1,2-Dichloroethane-d4 (Surr)	95		69 - 134
Toluene-d8 (Surr)	105		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-363925/5**

**Matrix: Solid**

**Analysis Batch: 363925**

**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	0.0473		mg/Kg		95	40 - 148	7	30
Benzene	0.0500	0.0480		mg/Kg		96	70 - 120	2	30
Bromodichloromethane	0.0500	0.0485		mg/Kg		97	67 - 120	1	30
Bromoform	0.0500	0.0475		mg/Kg		95	50 - 129	1	30
Bromomethane	0.0500	0.0419		mg/Kg		84	50 - 134	3	30
2-Butanone (MEK)	0.0500	0.0498		mg/Kg		100	47 - 138	4	30
Carbon disulfide	0.0500	0.0502		mg/Kg		100	67 - 133	1	30
Carbon tetrachloride	0.0500	0.0471		mg/Kg		94	65 - 123	1	30
Chlorobenzene	0.0500	0.0482		mg/Kg		96	70 - 120	1	30
Chloroethane	0.0500	0.0516		mg/Kg		103	40 - 150	16	30
Chloroform	0.0500	0.0489		mg/Kg		98	70 - 120	2	30
Chloromethane	0.0500	0.0407		mg/Kg		81	63 - 135	7	30
cis-1,2-Dichloroethene	0.0500	0.0486		mg/Kg		97	70 - 120	3	30
cis-1,3-Dichloropropene	0.0500	0.0489		mg/Kg		98	70 - 120	2	30
Dibromochloromethane	0.0500	0.0495		mg/Kg		99	68 - 120	1	30
1,1-Dichloroethane	0.0500	0.0489		mg/Kg		98	70 - 125	3	30
1,2-Dichloroethane	0.0500	0.0509		mg/Kg		102	65 - 126	4	30
1,1-Dichloroethene	0.0500	0.0493		mg/Kg		99	70 - 122	3	30
1,2-Dichloropropane	0.0500	0.0467		mg/Kg		93	70 - 126	1	30
Ethylbenzene	0.0500	0.0476		mg/Kg		95	70 - 120	3	30
2-Hexanone	0.0500	0.0522		mg/Kg		104	51 - 139	8	30
Methylene Chloride	0.0500	0.0500		mg/Kg		100	70 - 121	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0509		mg/Kg		102	51 - 141	4	30
Methyl tert-butyl ether	0.0500	0.0475		mg/Kg		95	70 - 121	4	30
Styrene	0.0500	0.0487		mg/Kg		97	70 - 121	0	30
1,1,1,2-Tetrachloroethane	0.0500	0.0532		mg/Kg		106	70 - 125	0	30
Tetrachloroethene	0.0500	0.0487		mg/Kg		97	70 - 122	1	30
Toluene	0.0500	0.0492		mg/Kg		98	70 - 121	1	30
trans-1,2-Dichloroethene	0.0500	0.0486		mg/Kg		97	70 - 120	2	30
trans-1,3-Dichloropropene	0.0500	0.0504		mg/Kg		101	70 - 121	1	30
1,1,1-Trichloroethane	0.0500	0.0478		mg/Kg		96	70 - 120	1	30
1,1,2-Trichloroethane	0.0500	0.0504		mg/Kg		101	70 - 120	1	30
Trichloroethene	0.0500	0.0483		mg/Kg		97	70 - 124	3	30
Vinyl acetate	0.0500	0.0512		mg/Kg		102	40 - 150	8	30
Vinyl chloride	0.0500	0.0443		mg/Kg		89	64 - 125	3	30
Xylenes, Total	0.100	0.100		mg/Kg		100	70 - 123	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	100		70 - 120
Dibromofluoromethane	96		75 - 120
1,2-Dichloroethane-d4 (Surr)	100		69 - 134
Toluene-d8 (Surr)	103		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-364629/1-A**

**Matrix: Solid**

**Analysis Batch: 364920**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 364629**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/12/16 09:38	12/13/16 19:18	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364629/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364920**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364629**

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		12/12/16 09:38	12/13/16 19:18	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/12/16 09:38	12/13/16 19:18	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/12/16 09:38	12/13/16 19:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/12/16 09:38	12/13/16 19:18	1
Phenol-d5	101		36 - 123	12/12/16 09:38	12/13/16 19:18	1
Nitrobenzene-d5	91		33 - 124	12/12/16 09:38	12/13/16 19:18	1
2-Fluorobiphenyl	91		42 - 115	12/12/16 09:38	12/13/16 19:18	1
2,4,6-Tribromophenol	70		25 - 130	12/12/16 09:38	12/13/16 19:18	1
Terphenyl-d14	102		25 - 150	12/12/16 09:38	12/13/16 19:18	1

**Lab Sample ID: LCS 500-364629/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364920**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364629**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.31		mg/Kg		98	55 - 118
Bis(2-chloroethyl)ether	1.33	1.12		mg/Kg		84	53 - 116
1,3-Dichlorobenzene	1.33	1.09		mg/Kg		81	56 - 110
1,4-Dichlorobenzene	1.33	1.11		mg/Kg		83	57 - 110
1,2-Dichlorobenzene	1.33	1.14		mg/Kg		85	56 - 110
2-Methylphenol	1.33	1.16		mg/Kg		87	53 - 123
2,2'-oxybis[1-chloropropane]	1.33	1.22		mg/Kg		91	22 - 133
N-Nitrosodi-n-propylamine	1.33	1.18		mg/Kg		89	56 - 119
Hexachloroethane	1.33	1.12		mg/Kg		84	54 - 111
2-Chlorophenol	1.33	1.20		mg/Kg		90	57 - 117
Nitrobenzene	1.33	1.17		mg/Kg		88	56 - 121
Bis(2-chloroethoxy)methane	1.33	1.19		mg/Kg		89	59 - 116
1,2,4-Trichlorobenzene	1.33	1.17		mg/Kg		88	60 - 116
Isophorone	1.33	1.10		mg/Kg		83	54 - 120
2,4-Dimethylphenol	1.33	1.11		mg/Kg		83	50 - 120
Hexachlorobutadiene	1.33	1.18		mg/Kg		88	56 - 120
Naphthalene	1.33	1.18		mg/Kg		88	58 - 116
2,4-Dichlorophenol	1.33	1.19		mg/Kg		90	61 - 116

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364629/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364920**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364629**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.34		mg/Kg		101	10 - 150
2,4,6-Trichlorophenol	1.33	1.20		mg/Kg		90	50 - 120
2,4,5-Trichlorophenol	1.33	1.18		mg/Kg		89	42 - 119
Hexachlorocyclopentadiene	1.33	0.873		mg/Kg		65	10 - 116
2-Methylnaphthalene	1.33	1.15		mg/Kg		86	55 - 120
2-Nitroaniline	1.33	1.21		mg/Kg		91	52 - 121
2-Chloronaphthalene	1.33	1.19		mg/Kg		89	57 - 112
4-Chloro-3-methylphenol	1.33	1.19		mg/Kg		89	59 - 117
2,6-Dinitrotoluene	1.33	1.21		mg/Kg		91	57 - 118
2-Nitrophenol	1.33	1.18		mg/Kg		88	58 - 121
3-Nitroaniline	1.33	1.35		mg/Kg		101	20 - 144
Dimethyl phthalate	1.33	1.20		mg/Kg		90	60 - 112
2,4-Dinitrophenol	2.67	0.648	J	mg/Kg		24	10 - 110
Acenaphthylene	1.33	1.15		mg/Kg		86	57 - 116
2,4-Dinitrotoluene	1.33	1.26		mg/Kg		95	59 - 119
Acenaphthene	1.33	1.18		mg/Kg		88	52 - 113
Dibenzofuran	1.33	1.19		mg/Kg		89	59 - 110
4-Nitrophenol	2.67	2.56		mg/Kg		96	32 - 123
Fluorene	1.33	1.20		mg/Kg		90	56 - 115
4-Nitroaniline	1.33	1.71		mg/Kg		128	55 - 146
4-Bromophenyl phenyl ether	1.33	1.20		mg/Kg		90	61 - 124
Hexachlorobenzene	1.33	1.19		mg/Kg		89	62 - 126
Diethyl phthalate	1.33	1.23		mg/Kg		92	58 - 117
4-Chlorophenyl phenyl ether	1.33	1.22		mg/Kg		91	61 - 111
Pentachlorophenol	2.67	2.01		mg/Kg		75	12 - 116
N-Nitrosodiphenylamine	1.33	1.22		mg/Kg		92	62 - 117
4,6-Dinitro-2-methylphenol	2.67	1.43		mg/Kg		54	10 - 110
Phenanthrene	1.33	1.19		mg/Kg		89	58 - 125
Anthracene	1.33	1.20		mg/Kg		90	57 - 118
Carbazole	1.33	1.45		mg/Kg		109	65 - 137
Di-n-butyl phthalate	1.33	1.24		mg/Kg		93	61 - 123
Fluoranthene	1.33	1.21		mg/Kg		91	61 - 124
Pyrene	1.33	1.21		mg/Kg		90	60 - 115
Butyl benzyl phthalate	1.33	1.24		mg/Kg		93	61 - 115
Benzo[a]anthracene	1.33	1.16		mg/Kg		87	63 - 115
Chrysene	1.33	1.22		mg/Kg		92	63 - 118
3,3'-Dichlorobenzidine	1.33	1.08		mg/Kg		81	40 - 110
Bis(2-ethylhexyl) phthalate	1.33	1.25		mg/Kg		94	62 - 117
Di-n-octyl phthalate	1.33	1.26		mg/Kg		95	58 - 129
Benzo[b]fluoranthene	1.33	1.20		mg/Kg		90	61 - 123
Benzo[k]fluoranthene	1.33	1.23		mg/Kg		92	59 - 125
Benzo[a]pyrene	1.33	1.24		mg/Kg		93	64 - 122
Indeno[1,2,3-cd]pyrene	1.33	1.25		mg/Kg		93	50 - 149
Dibenz(a,h)anthracene	1.33	1.24		mg/Kg		93	61 - 134
Benzo[g,h,i]perylene	1.33	1.27		mg/Kg		96	55 - 134
3 & 4 Methylphenol	1.33	1.19		mg/Kg		89	55 - 124

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364629/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364920**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364629**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	101		40 - 130
Phenol-d5	92		36 - 123
Nitrobenzene-d5	91		33 - 124
2-Fluorobiphenyl	88		42 - 115
2,4,6-Tribromophenol	101		25 - 130
Terphenyl-d14	98		25 - 150

**Lab Sample ID: 500-121005-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 364920**

**Client Sample ID: 1314V3-60-B06 (0-6)**  
**Prep Type: Total/NA**  
**Prep Batch: 364629**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.18		1.46	1.10		mg/Kg	☼	75	55 - 118
Bis(2-chloroethyl)ether	<0.18	F1 F2	1.46	2.17	F1	mg/Kg	☼	149	53 - 116
1,3-Dichlorobenzene	<0.18		1.46	0.942		mg/Kg	☼	65	56 - 110
1,4-Dichlorobenzene	<0.18		1.46	0.964		mg/Kg	☼	66	57 - 110
1,2-Dichlorobenzene	<0.18		1.46	0.958		mg/Kg	☼	66	56 - 110
2-Methylphenol	<0.18		1.46	1.01		mg/Kg	☼	69	53 - 123
2,2'-oxybis[1-chloropropane]	<0.18		1.46	1.03		mg/Kg	☼	71	22 - 133
N-Nitrosodi-n-propylamine	<0.072		1.46	0.999		mg/Kg	☼	68	56 - 119
Hexachloroethane	<0.18	F1	1.46	0.775	F1	mg/Kg	☼	53	54 - 111
2-Chlorophenol	<0.18	F1	1.46	0.668	F1	mg/Kg	☼	46	57 - 117
Nitrobenzene	<0.036		1.46	1.03		mg/Kg	☼	71	56 - 121
Bis(2-chloroethoxy)methane	<0.18		1.46	1.06		mg/Kg	☼	73	59 - 116
1,2,4-Trichlorobenzene	<0.18		1.46	1.03		mg/Kg	☼	71	60 - 116
Isophorone	<0.18		1.46	0.955		mg/Kg	☼	65	54 - 120
2,4-Dimethylphenol	<0.36		1.46	1.08		mg/Kg	☼	74	50 - 120
Hexachlorobutadiene	<0.18		1.46	1.02		mg/Kg	☼	70	56 - 120
Naphthalene	<0.036		1.46	1.06		mg/Kg	☼	72	58 - 116
2,4-Dichlorophenol	<0.36	F1	1.46	0.545	F1	mg/Kg	☼	37	61 - 116
4-Chloroaniline	<0.72		1.46	1.00		mg/Kg	☼	69	10 - 150
2,4,6-Trichlorophenol	<0.36	F1	1.46	0.624	F1	mg/Kg	☼	43	50 - 120
2,4,5-Trichlorophenol	<0.36	F1	1.46	0.583	F1	mg/Kg	☼	40	42 - 119
Hexachlorocyclopentadiene	<0.72	F1	1.46	<0.73	F1	mg/Kg	☼	0	10 - 116
2-Methylnaphthalene	0.094		1.46	1.10		mg/Kg	☼	69	55 - 120
2-Nitroaniline	<0.18		1.46	1.12		mg/Kg	☼	77	52 - 121
2-Chloronaphthalene	<0.18		1.46	1.08		mg/Kg	☼	74	57 - 112
4-Chloro-3-methylphenol	<0.36		1.46	0.985		mg/Kg	☼	67	59 - 117
2,6-Dinitrotoluene	<0.18		1.46	1.07		mg/Kg	☼	73	57 - 118
2-Nitrophenol	<0.36	F1	1.46	0.412	F1	mg/Kg	☼	28	58 - 121
3-Nitroaniline	<0.36		1.46	1.63		mg/Kg	☼	112	20 - 144
Dimethyl phthalate	<0.18		1.46	1.12		mg/Kg	☼	77	60 - 112
2,4-Dinitrophenol	<0.72	F1	2.92	<0.73	F1	mg/Kg	☼	0	10 - 110
Acenaphthylene	0.0049	J	1.46	1.05		mg/Kg	☼	71	57 - 116
2,4-Dinitrotoluene	<0.18		1.46	0.984		mg/Kg	☼	67	59 - 119
Acenaphthene	0.25		1.46	1.29		mg/Kg	☼	71	52 - 113
Dibenzofuran	0.19		1.46	1.30		mg/Kg	☼	76	59 - 110
4-Nitrophenol	<0.72		2.92	1.72		mg/Kg	☼	59	32 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-121005-3 MS**

**Matrix: Solid**

**Analysis Batch: 364920**

**Client Sample ID: 1314V3-60-B06 (0-6)**

**Prep Type: Total/NA**

**Prep Batch: 364629**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Fluorene	0.26		1.46	1.36		mg/Kg	☼	75		56 - 115
4-Nitroaniline	<0.36		1.46	1.68		mg/Kg	☼	115		55 - 146
4-Bromophenyl phenyl ether	<0.18		1.46	1.21		mg/Kg	☼	83		61 - 124
Hexachlorobenzene	<0.072		1.46	1.21		mg/Kg	☼	83		62 - 126
Diethyl phthalate	<0.18		1.46	1.20		mg/Kg	☼	82		58 - 117
4-Chlorophenyl phenyl ether	<0.18		1.46	1.21		mg/Kg	☼	83		61 - 111
Pentachlorophenol	<0.72	F1	2.92	<0.73	F1	mg/Kg	☼	0		12 - 116
N-Nitrosodiphenylamine	<0.18		1.46	1.21		mg/Kg	☼	83		62 - 117
4,6-Dinitro-2-methylphenol	<0.72	F1	2.92	<0.73	F1	mg/Kg	☼	0		10 - 110
Phenanthrene	2.5	F1	1.46	3.02	E F1	mg/Kg	☼	35		58 - 125
Anthracene	0.65	F1	1.46	1.64		mg/Kg	☼	68		57 - 118
Carbazole	0.43		1.46	1.83		mg/Kg	☼	96		65 - 137
Di-n-butyl phthalate	<0.18		1.46	1.19		mg/Kg	☼	81		61 - 123
Fluoranthene	3.0	E F1	1.46	3.43	E F1	mg/Kg	☼	32		61 - 124
Pyrene	2.2	F1	1.46	3.60	E	mg/Kg	☼	92		60 - 115
Butyl benzyl phthalate	<0.18		1.46	1.42		mg/Kg	☼	97		61 - 115
Benzo[a]anthracene	1.2	F1	1.46	2.11		mg/Kg	☼	65		63 - 115
Chrysene	1.1	F1	1.46	2.04	F1	mg/Kg	☼	61		63 - 118
3,3'-Dichlorobenzidine	<0.18		1.46	1.13		mg/Kg	☼	77		40 - 110
Bis(2-ethylhexyl) phthalate	<0.18		1.46	1.49		mg/Kg	☼	102		62 - 117
Di-n-octyl phthalate	<0.18		1.46	1.04		mg/Kg	☼	71		58 - 129
Benzo[b]fluoranthene	1.5	F1	1.46	2.94	E	mg/Kg	☼	101		61 - 123
Benzo[k]fluoranthene	0.50		1.46	2.23		mg/Kg	☼	119		59 - 125
Benzo[a]pyrene	0.97	F1	1.46	2.04		mg/Kg	☼	74		64 - 122
Indeno[1,2,3-cd]pyrene	0.34	F1	1.46	0.889	F1	mg/Kg	☼	38		50 - 149
Dibenz(a,h)anthracene	0.12	F1	1.46	0.766	F1	mg/Kg	☼	44		61 - 134
Benzo[g,h,i]perylene	0.32	F1	1.46	0.818	F1	mg/Kg	☼	34		55 - 134
3 & 4 Methylphenol	<0.18		1.46	1.06		mg/Kg	☼	73		55 - 124

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	23	X	40 - 130
Phenol-d5	77		36 - 123
Nitrobenzene-d5	73		33 - 124
2-Fluorobiphenyl	73		42 - 115
2,4,6-Tribromophenol	43		25 - 130
Terphenyl-d14	112		25 - 150

**Lab Sample ID: 500-121005-3 MSD**

**Matrix: Solid**

**Analysis Batch: 364920**

**Client Sample ID: 1314V3-60-B06 (0-6)**

**Prep Type: Total/NA**

**Prep Batch: 364629**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Phenol	<0.18		1.46	1.05		mg/Kg	☼	72		55 - 118	5	30
Bis(2-chloroethyl)ether	<0.18	F1 F2	1.46	0.702	F1 F2	mg/Kg	☼	48		53 - 116	102	30
1,3-Dichlorobenzene	<0.18		1.46	0.921		mg/Kg	☼	63		56 - 110	2	30
1,4-Dichlorobenzene	<0.18		1.46	0.926		mg/Kg	☼	63		57 - 110	4	30
1,2-Dichlorobenzene	<0.18		1.46	0.935		mg/Kg	☼	64		56 - 110	2	30
2-Methylphenol	<0.18		1.46	0.941		mg/Kg	☼	64		53 - 123	7	30

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-121005-3 MSD**

**Matrix: Solid**

**Analysis Batch: 364920**

**Client Sample ID: 1314V3-60-B06 (0-6)**

**Prep Type: Total/NA**

**Prep Batch: 364629**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.18		1.46	1.00		mg/Kg	☼	69	22 - 133	3	30
N-Nitrosodi-n-propylamine	<0.072		1.46	0.970		mg/Kg	☼	66	56 - 119	3	30
Hexachloroethane	<0.18	F1	1.46	0.796		mg/Kg	☼	54	54 - 111	3	30
2-Chlorophenol	<0.18	F1	1.46	0.801	F1	mg/Kg	☼	55	57 - 117	18	30
Nitrobenzene	<0.036		1.46	0.995		mg/Kg	☼	68	56 - 121	4	30
Bis(2-chloroethoxy)methane	<0.18		1.46	0.995		mg/Kg	☼	68	59 - 116	7	30
1,2,4-Trichlorobenzene	<0.18		1.46	0.983		mg/Kg	☼	67	60 - 116	5	30
Isophorone	<0.18		1.46	0.910		mg/Kg	☼	62	54 - 120	5	30
2,4-Dimethylphenol	<0.36		1.46	0.964		mg/Kg	☼	66	50 - 120	11	30
Hexachlorobutadiene	<0.18		1.46	0.970		mg/Kg	☼	66	56 - 120	5	30
Naphthalene	<0.036		1.46	1.01		mg/Kg	☼	69	58 - 116	5	30
2,4-Dichlorophenol	<0.36	F1	1.46	0.615	F1	mg/Kg	☼	42	61 - 116	12	30
4-Chloroaniline	<0.72		1.46	0.851		mg/Kg	☼	58	10 - 150	16	30
2,4,6-Trichlorophenol	<0.36	F1	1.46	0.478	F1	mg/Kg	☼	33	50 - 120	26	30
2,4,5-Trichlorophenol	<0.36	F1	1.46	0.468	F1	mg/Kg	☼	32	42 - 119	22	30
Hexachlorocyclopentadiene	<0.72	F1	1.46	<0.73	F1	mg/Kg	☼	0	10 - 116	NC	30
2-Methylnaphthalene	0.094		1.46	1.01		mg/Kg	☼	63	55 - 120	9	30
2-Nitroaniline	<0.18		1.46	1.04		mg/Kg	☼	71	52 - 121	7	30
2-Chloronaphthalene	<0.18		1.46	1.00		mg/Kg	☼	69	57 - 112	7	30
4-Chloro-3-methylphenol	<0.36		1.46	0.946		mg/Kg	☼	65	59 - 117	4	30
2,6-Dinitrotoluene	<0.18		1.46	1.02		mg/Kg	☼	70	57 - 118	5	30
2-Nitrophenol	<0.36	F1	1.46	0.483	F1	mg/Kg	☼	33	58 - 121	16	30
3-Nitroaniline	<0.36		1.46	1.31		mg/Kg	☼	90	20 - 144	22	30
Dimethyl phthalate	<0.18		1.46	1.01		mg/Kg	☼	69	60 - 112	10	30
2,4-Dinitrophenol	<0.72	F1	2.92	<0.73	F1	mg/Kg	☼	0	10 - 110	NC	30
Acenaphthylene	0.0049	J	1.46	0.969		mg/Kg	☼	66	57 - 116	8	30
2,4-Dinitrotoluene	<0.18		1.46	0.972		mg/Kg	☼	67	59 - 119	1	30
Acenaphthene	0.25		1.46	1.16		mg/Kg	☼	62	52 - 113	10	30
Dibenzofuran	0.19		1.46	1.18		mg/Kg	☼	68	59 - 110	10	30
4-Nitrophenol	<0.72		2.92	1.59		mg/Kg	☼	54	32 - 123	8	30
Fluorene	0.26		1.46	1.22		mg/Kg	☼	66	56 - 115	11	30
4-Nitroaniline	<0.36		1.46	1.57		mg/Kg	☼	107	55 - 146	7	30
4-Bromophenyl phenyl ether	<0.18		1.46	1.05		mg/Kg	☼	72	61 - 124	13	30
Hexachlorobenzene	<0.072		1.46	1.07		mg/Kg	☼	73	62 - 126	12	30
Diethyl phthalate	<0.18		1.46	1.11		mg/Kg	☼	76	58 - 117	8	30
4-Chlorophenyl phenyl ether	<0.18		1.46	1.08		mg/Kg	☼	74	61 - 111	12	30
Pentachlorophenol	<0.72	F1	2.92	<0.73	F1	mg/Kg	☼	0	12 - 116	NC	30
N-Nitrosodiphenylamine	<0.18		1.46	1.04		mg/Kg	☼	71	62 - 117	15	30
4,6-Dinitro-2-methylphenol	<0.72	F1	2.92	<0.73	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	2.5	F1	1.46	2.51	F1	mg/Kg	☼	0.6	58 - 125	18	30
Anthracene	0.65	F1	1.46	1.41	F1	mg/Kg	☼	52	57 - 118	15	30
Carbazole	0.43		1.46	1.58		mg/Kg	☼	79	65 - 137	14	30
Di-n-butyl phthalate	<0.18		1.46	1.07		mg/Kg	☼	73	61 - 123	11	30
Fluoranthene	3.0	E F1	1.46	2.84	E F1	mg/Kg	☼	-8	61 - 124	19	30
Pyrene	2.2	F1	1.46	2.89	E F1	mg/Kg	☼	44	60 - 115	22	30
Butyl benzyl phthalate	<0.18		1.46	1.25		mg/Kg	☼	86	61 - 115	13	30
Benzo[a]anthracene	1.2	F1	1.46	1.76	F1	mg/Kg	☼	41	63 - 115	18	30
Chrysene	1.1	F1	1.46	1.76	F1	mg/Kg	☼	42	63 - 118	14	30

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-121005-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364920**

**Client Sample ID: 1314V3-60-B06 (0-6)**  
**Prep Type: Total/NA**  
**Prep Batch: 364629**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
3,3'-Dichlorobenzidine	<0.18		1.46	1.01		mg/Kg	☼	69	40 - 110	12	30
Bis(2-ethylhexyl) phthalate	<0.18		1.46	1.32		mg/Kg	☼	90	62 - 117	12	30
Di-n-octyl phthalate	<0.18		1.46	0.976		mg/Kg	☼	67	58 - 129	6	30
Benzo[b]fluoranthene	1.5	F1	1.46	2.30	F1	mg/Kg	☼	57	61 - 123	24	30
Benzo[k]fluoranthene	0.50		1.46	1.82		mg/Kg	☼	91	59 - 125	20	30
Benzo[a]pyrene	0.97	F1	1.46	1.70	F1	mg/Kg	☼	50	64 - 122	18	30
Indeno[1,2,3-cd]pyrene	0.34	F1	1.46	0.754	F1	mg/Kg	☼	28	50 - 149	16	30
Dibenz(a,h)anthracene	0.12	F1	1.46	0.656	F1	mg/Kg	☼	37	61 - 134	15	30
Benzo[g,h,i]perylene	0.32	F1	1.46	0.674	F1	mg/Kg	☼	24	55 - 134	19	30
3 & 4 Methylphenol	<0.18		1.46	0.994		mg/Kg	☼	68	55 - 124	6	30
<b>MSD MSD</b>											
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
2-Fluorophenol	38	X	40 - 130								
Phenol-d5	69		36 - 123								
Nitrobenzene-d5	69		33 - 124								
2-Fluorobiphenyl	68		42 - 115								
2,4,6-Tribromophenol	34		25 - 130								
Terphenyl-d14	97		25 - 150								

## Method: 6010B - Metals (ICP)

**Lab Sample ID: LCS 500-364209/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364518**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364209**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Lead	0.100	0.101		mg/L		101	80 - 120
Manganese	0.500	0.528		mg/L		106	80 - 120

**Lab Sample ID: LCS 500-364210/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364518**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364210**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Barium	0.500	0.545		mg/L		109	80 - 120
Beryllium	0.0500	0.0559		mg/L		112	80 - 120
Boron	1.00	1.07		mg/L		107	80 - 120
Cadmium	0.0500	0.0543		mg/L		109	80 - 120
Chromium	0.200	0.223		mg/L		111	80 - 120
Cobalt	0.500	0.537		mg/L		107	80 - 120
Iron	1.00	1.12		mg/L		112	80 - 120
Lead	0.100	0.110		mg/L		110	80 - 120
Manganese	0.500	0.583		mg/L		117	80 - 120
Nickel	0.500	0.541		mg/L		108	80 - 120
Selenium	0.100	0.101		mg/L		101	80 - 120
Silver	0.0500	0.0524		mg/L		105	80 - 120
Zinc	0.500	0.554		mg/L		111	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-364230/1-A**  
**Matrix: Solid**  
**Analysis Batch: 364449**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364230**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.42	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Barium	<1.0		1.0	0.18	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Boron	<5.0		5.0	0.70	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Calcium	<20		20	6.4	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Chromium	0.302	J	1.0	0.17	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Copper	<1.0		1.0	0.22	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Iron	<20		20	7.7	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Lead	<0.50		0.50	0.25	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Magnesium	<10		10	4.1	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Nickel	<1.0		1.0	0.27	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Potassium	<50		50	8.2	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Silver	<0.50		0.50	0.12	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Sodium	<100		100	13	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/08/16 15:09	12/09/16 12:43	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/08/16 15:09	12/09/16 12:43	1

**Lab Sample ID: LCS 500-364230/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364449**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364230**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	46.0		mg/Kg		92	80 - 120
Arsenic	10.0	9.32		mg/Kg		93	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	5.00	4.69		mg/Kg		94	80 - 120
Boron	100	85.5		mg/Kg		85	80 - 120
Cadmium	5.00	4.70		mg/Kg		94	80 - 120
Calcium	1000	961		mg/Kg		96	80 - 120
Chromium	20.0	19.1		mg/Kg		96	80 - 120
Cobalt	50.0	46.5		mg/Kg		93	80 - 120
Copper	25.0	22.9		mg/Kg		92	80 - 120
Iron	100	102		mg/Kg		102	80 - 120
Lead	10.0	9.39		mg/Kg		94	80 - 120
Magnesium	1000	934		mg/Kg		93	80 - 120
Manganese	50.0	47.4		mg/Kg		95	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Potassium	1000	923		mg/Kg		92	80 - 120
Selenium	10.0	8.69		mg/Kg		87	80 - 120
Silver	5.00	4.42		mg/Kg		88	80 - 120
Sodium	1000	943		mg/Kg		94	80 - 120
Thallium	10.0	8.62		mg/Kg		86	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-364230/2-A**  
**Matrix: Solid**  
**Analysis Batch: 364449**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364230**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Vanadium	50.0	47.6		mg/Kg		95	80 - 120
Zinc	50.0	45.5		mg/Kg		91	80 - 120

**Lab Sample ID: 500-121005-15 MS**  
**Matrix: Solid**  
**Analysis Batch: 364449**

**Client Sample ID: 1314V3-01-B34 (14-20)**  
**Prep Type: Total/NA**  
**Prep Batch: 364230**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.34	J F1	27.4	6.11	F1	mg/Kg	☼	21	75 - 125
Arsenic	3.0	F1 F2	5.49	11.2	F1	mg/Kg	☼	150	75 - 125
Barium	48		110	141		mg/Kg	☼	85	75 - 125
Beryllium	0.46		2.74	2.68		mg/Kg	☼	81	75 - 125
Boron	2.5	J F1	54.9	36.3	F1	mg/Kg	☼	62	75 - 125
Cadmium	0.15		2.74	2.38		mg/Kg	☼	81	75 - 125
Calcium	30000		549	30300	4	mg/Kg	☼	118	75 - 125
Chromium	11	B	11.0	22.0		mg/Kg	☼	100	75 - 125
Cobalt	6.8	F1 F2	27.4	42.7	F1	mg/Kg	☼	131	75 - 125
Copper	11		13.7	21.6		mg/Kg	☼	80	75 - 125
Iron	12000		54.9	13400	4	mg/Kg	☼	2574	75 - 125
Lead	8.1		5.49	14.0		mg/Kg	☼	108	75 - 125
Magnesium	15000		549	16200	4	mg/Kg	☼	161	75 - 125
Manganese	250		27.4	268	4	mg/Kg	☼	61	75 - 125
Nickel	17	F1 F2	27.4	54.5	F1	mg/Kg	☼	138	75 - 125
Potassium	750	F1	549	1510	F1	mg/Kg	☼	138	75 - 125
Selenium	0.41	J F1	5.49	4.31	F1	mg/Kg	☼	71	75 - 125
Silver	<0.28	F1	2.74	2.06		mg/Kg	☼	75	75 - 125
Sodium	76		549	544		mg/Kg	☼	85	75 - 125
Thallium	<0.56		5.49	4.29		mg/Kg	☼	78	75 - 125
Vanadium	17		27.4	42.4		mg/Kg	☼	94	75 - 125
Zinc	32		27.4	64.9		mg/Kg	☼	121	75 - 125

**Lab Sample ID: 500-121005-15 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364449**

**Client Sample ID: 1314V3-01-B34 (14-20)**  
**Prep Type: Total/NA**  
**Prep Batch: 364230**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Antimony	0.34	J F1	27.2	6.16	F1	mg/Kg	☼	21	75 - 125	1	20
Arsenic	3.0	F1 F2	5.43	7.27	F2	mg/Kg	☼	78	75 - 125	43	20
Barium	48		109	132		mg/Kg	☼	78	75 - 125	7	20
Beryllium	0.46		2.72	2.64		mg/Kg	☼	80	75 - 125	1	20
Boron	2.5	J F1	54.3	37.8	F1	mg/Kg	☼	65	75 - 125	4	20
Cadmium	0.15		2.72	2.31		mg/Kg	☼	80	75 - 125	3	20
Calcium	30000		543	30200	4	mg/Kg	☼	84	75 - 125	1	20
Chromium	11	B	10.9	22.2		mg/Kg	☼	103	75 - 125	1	20
Cobalt	6.8	F1 F2	27.2	32.4	F2	mg/Kg	☼	94	75 - 125	28	20
Copper	11		13.6	22.0		mg/Kg	☼	83	75 - 125	2	20
Iron	12000		54.3	13200	4	mg/Kg	☼	2243	75 - 125	1	20
Lead	8.1		5.43	13.5		mg/Kg	☼	101	75 - 125	3	20
Magnesium	15000		543	16500	4	mg/Kg	☼	228	75 - 125	2	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-121005-15 MSD**

**Matrix: Solid**

**Analysis Batch: 364449**

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Prep Type: Total/NA**

**Prep Batch: 364230**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Manganese	250		27.2	273	4	mg/Kg	☼	79	75 - 125	2	20
Nickel	17	F1 F2	27.2	41.2	F2	mg/Kg	☼	91	75 - 125	28	20
Potassium	750	F1	543	1590	F1	mg/Kg	☼	155	75 - 125	5	20
Selenium	0.41	J F1	5.43	4.19	F1	mg/Kg	☼	70	75 - 125	3	20
Silver	<0.28	F1	2.72	2.00	F1	mg/Kg	☼	74	75 - 125	3	20
Sodium	76		543	536		mg/Kg	☼	84	75 - 125	2	20
Thallium	<0.56		5.43	4.06		mg/Kg	☼	75	75 - 125	5	20
Vanadium	17		27.2	42.7		mg/Kg	☼	96	75 - 125	1	20
Zinc	32		27.2	59.9		mg/Kg	☼	104	75 - 125	8	20

**Lab Sample ID: 500-121005-15 DU**

**Matrix: Solid**

**Analysis Batch: 364449**

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Prep Type: Total/NA**

**Prep Batch: 364230**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	0.34	J F1	<1.1		mg/Kg	☼	NC	20
Arsenic	3.0	F1 F2	3.45		mg/Kg	☼	13	20
Barium	48		46.7		mg/Kg	☼	2	20
Beryllium	0.46		0.448		mg/Kg	☼	2	20
Boron	2.5	J F1	2.70	J	mg/Kg	☼	7	20
Cadmium	0.15		0.160		mg/Kg	☼	10	20
Calcium	30000		30400		mg/Kg	☼	2	20
Chromium	11	B	11.2		mg/Kg	☼	1	20
Cobalt	6.8	F1 F2	6.64		mg/Kg	☼	2	20
Copper	11		11.2		mg/Kg	☼	5	20
Iron	12000		12500		mg/Kg	☼	5	20
Lead	8.1		8.55		mg/Kg	☼	6	20
Magnesium	15000		15200		mg/Kg	☼	0.5	20
Manganese	250		286		mg/Kg	☼	13	20
Nickel	17	F1 F2	15.4		mg/Kg	☼	8	20
Potassium	750	F1	765		mg/Kg	☼	2	20
Selenium	0.41	J F1	0.514	J F5	mg/Kg	☼	23	20
Silver	<0.28	F1	<0.28		mg/Kg	☼	NC	20
Sodium	76		76.4		mg/Kg	☼	0.1	20
Thallium	<0.56		<0.56		mg/Kg	☼	NC	20
Vanadium	17		16.6		mg/Kg	☼	0.5	20
Zinc	32		34.2		mg/Kg	☼	8	20

**Lab Sample ID: LB 500-364018/1-C**

**Matrix: Solid**

**Analysis Batch: 364518**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 364210**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/08/16 14:21	12/10/16 17:04	1
Boron	<0.50		0.50	0.050	mg/L		12/08/16 14:21	12/10/16 17:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/08/16 14:21	12/10/16 17:04	1
Chromium	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:04	1
Cobalt	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:04	1

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-364018/1-C**  
**Matrix: Solid**  
**Analysis Batch: 364518**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 364210**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	<0.40		0.40	0.20	mg/L		12/08/16 14:21	12/10/16 17:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:21	12/10/16 17:04	1
Manganese	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:04	1
Nickel	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:04	1
Selenium	<0.050		0.050	0.020	mg/L		12/08/16 14:21	12/10/16 17:04	1
Silver	<0.025		0.025	0.010	mg/L		12/08/16 14:21	12/10/16 17:04	1
Zinc	<0.50		0.50	0.020	mg/L		12/08/16 14:21	12/10/16 17:04	1

**Lab Sample ID: 500-121005-15 MS**  
**Matrix: Solid**  
**Analysis Batch: 364518**

**Client Sample ID: 1314V3-01-B34 (14-20)**  
**Prep Type: TCLP**  
**Prep Batch: 364210**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Barium	0.74		0.500	1.19		mg/L		90	50 - 150
Beryllium	<0.0040		0.0500	0.0485		mg/L		97	50 - 150
Boron	0.051	J	1.00	0.996		mg/L		95	50 - 150
Cadmium	<0.0050		0.0500	0.0460		mg/L		92	50 - 150
Chromium	<0.025		0.200	0.186		mg/L		93	50 - 150
Cobalt	0.016	J	0.500	0.454		mg/L		88	50 - 150
Iron	2.7		1.00	3.56		mg/L		86	50 - 150
Lead	<0.0075		0.100	0.0923		mg/L		92	50 - 150
Manganese	3.9		0.500	4.31	4	mg/L		77	50 - 150
Nickel	0.033		0.500	0.467		mg/L		87	50 - 150
Selenium	<0.050		0.100	0.102		mg/L		102	50 - 150
Silver	<0.025		0.0500	0.0504		mg/L		101	50 - 150
Zinc	0.023	J	0.500	0.483	J	mg/L		92	50 - 150

**Lab Sample ID: 500-121005-15 DU**  
**Matrix: Solid**  
**Analysis Batch: 364518**

**Client Sample ID: 1314V3-01-B34 (14-20)**  
**Prep Type: TCLP**  
**Prep Batch: 364210**

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	
			Result	Qualifier			RPD	Limit
Barium	0.74		0.740		mg/L		0.4	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.051	J	0.0513	J	mg/L		0.8	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.016	J	0.0163	J	mg/L		5	20
Iron	2.7		2.75		mg/L		2	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	3.9		3.97		mg/L		1	20
Nickel	0.033		0.0336		mg/L		2	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.023	J	0.0223	J	mg/L		2	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-364005/1-B  
Matrix: Solid  
Analysis Batch: 364518

Client Sample ID: Method Blank  
Prep Type: SPLP East  
Prep Batch: 364209

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/08/16 14:20	12/11/16 02:05	1
Manganese	<0.025		0.025	0.010	mg/L		12/08/16 14:20	12/11/16 02:05	1

## Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-364210/2-A  
Matrix: Solid  
Analysis Batch: 364634

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 364210  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.476		mg/L		95	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LB 500-364018/1-C  
Matrix: Solid  
Analysis Batch: 364634

Client Sample ID: Method Blank  
Prep Type: TCLP  
Prep Batch: 364210

Analyte	LB Result	LB 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 16:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/08/16 14:21	12/09/16 16:32	1

Lab Sample ID: 500-121005-15 MS  
Matrix: Solid  
Analysis Batch: 364634

Client Sample ID: 1314V3-01-B34 (14-20)  
Prep Type: TCLP  
Prep Batch: 364210  
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.430		mg/L		86	50 - 150
Thallium	<0.0020		0.100	0.0886		mg/L		89	50 - 150

Lab Sample ID: 500-121005-15 DU  
Matrix: Solid  
Analysis Batch: 364634

Client Sample ID: 1314V3-01-B34 (14-20)  
Prep Type: TCLP  
Prep Batch: 364210  
RPD

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
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 500-364199/12-A  
Matrix: Solid  
Analysis Batch: 364397

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 364199

Analyte	MB Result	MB 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 09:20	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 7470A - TCLP Mercury (Continued)

**Lab Sample ID: LCS 500-364199/13-A**  
**Matrix: Solid**  
**Analysis Batch: 364397**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364199**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00185		mg/L		92	80 - 120

**Lab Sample ID: LB 500-364018/1-B**  
**Matrix: Solid**  
**Analysis Batch: 364397**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 364199**

Analyte	LB Result	LB 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 09:31	1

**Lab Sample ID: 500-121005-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 364397**

**Client Sample ID: 1314V3-60-B01 (0-6)**  
**Prep Type: TCLP**  
**Prep Batch: 364199**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000931		mg/L		93	50 - 150

**Lab Sample ID: 500-121005-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 364397**

**Client Sample ID: 1314V3-60-B01 (0-6)**  
**Prep Type: TCLP**  
**Prep Batch: 364199**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-364021/12-A**  
**Matrix: Solid**  
**Analysis Batch: 364194**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364021**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg		12/07/16 14:45	12/08/16 10:52	1

**Lab Sample ID: LCS 500-364021/13-A**  
**Matrix: Solid**  
**Analysis Batch: 364194**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364021**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.159		mg/Kg		95	80 - 120

**Lab Sample ID: 500-121005-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 364194**

**Client Sample ID: 1314V3-60-B01 (0-6)**  
**Prep Type: Total/NA**  
**Prep Batch: 364021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.042		0.0918	0.119		mg/Kg	✱	84	75 - 125

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# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

## Method: 7471B - Mercury (CVAA) (Continued)

**Lab Sample ID: 500-121005-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 364194**

**Client Sample ID: 1314V3-60-B01 (0-6)**  
**Prep Type: Total/NA**  
**Prep Batch: 364021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Mercury	0.042		0.0905	0.118		mg/Kg	☼	83	75 - 125	1	20

**Lab Sample ID: 500-121005-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 364194**

**Client Sample ID: 1314V3-60-B01 (0-6)**  
**Prep Type: Total/NA**  
**Prep Batch: 364021**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.042		0.0472		mg/Kg	☼	11	20

## Method: 9045D - pH

**Lab Sample ID: 500-121005-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 364502**

**Client Sample ID: 1314V3-60-B01 (0-6)**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.6		7.6		SU		0.3	



# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 17:18	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 16:38	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:32	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502		SMO	TAL CHI
					(Start)	12/09/16 18:57		
					(End)	12/09/16 19:00		
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 14:30	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 19:47	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 13:34	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 10:57	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 17:25	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 16:42	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:43	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	364502	12/09/16 19:03 (Start) 12/09/16 19:07 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 14:55	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 20:16	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 13:37	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:06	MJD	TAL CHI

**Client Sample ID: 1314V3-60-B06 (0-6)**

**Lab Sample ID: 500-121005-3**

**Date Collected: 12/05/16 13:05**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 17:31	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 16:45	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:44	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	12/09/16 19:07 (Start) 12/09/16 19:10 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-60-B06 (0-6)**

**Lab Sample ID: 500-121005-3**

**Date Collected: 12/05/16 13:05**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 88.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 15:20	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/14/16 03:03	GES	TAL CHI
Total/NA	Prep	3541	DL		364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D	DL	5	365062	12/14/16 16:27	AJD	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 13:42	PJ1	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		10	364522	12/09/16 23:18	KML	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:08	MJD	TAL CHI

**Client Sample ID: 1314V3-60-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

**Date Collected: 12/05/16 13:10**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 17:38	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 16:49	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:46	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502		SMO	TAL CHI
					(Start)	12/09/16 19:10		
					(End)	12/09/16 19:14		
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**Client Sample ID: 1314V3-60-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

**Date Collected: 12/05/16 13:10**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 79.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 15:44	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 20:45	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 13:47	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-60-B06 (6-12)**

**Lab Sample ID: 500-121005-4**

Date Collected: 12/05/16 13:10

Matrix: Solid

Date Received: 12/06/16 10:30

Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	364194	12/08/16 11:15	MJD	TAL CHI

**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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 17:45	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 16:52	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:47	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	(Start) 12/09/16 19:14 (End) 12/09/16 19:17	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 16:09	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 21:14	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 13:58	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:18	MJD	TAL CHI

**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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:07	KML	TAL CHI

TestAmerica Chicago



# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 16:56	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:49	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	(Start) 12/09/16 19:17 (End) 12/09/16 19:21	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 16:34	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 21:43	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:03	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:20	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364005	12/07/16 12:00	RMP	TAL CHI
SPLP East	Prep	3010A			364209	12/08/16 14:20	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364518	12/11/16 03:15	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:14	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 16:59	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:50	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	364502	12/09/16 19:21 (Start) 12/09/16 19:24 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 16:59	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/14/16 03:32	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:07	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:22	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:21	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:02	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:52	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	12/09/16 19:24 (Start) 12/09/16 19:28 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 17:24	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 22:12	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:12	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 12:04	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:28	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:13	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:53	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502		SMO	TAL CHI
					(Start)	12/09/16 19:28		
					(End)	12/09/16 19:31		
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 17:48	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 22:41	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:16	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:27	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364005	12/07/16 12:00	RMP	TAL CHI
SPLP East	Prep	3010A			364209	12/08/16 14:20	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364518	12/11/16 03:36	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:35	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:16	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:54	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	(Start) 12/09/16 19:31 (End) 12/09/16 19:35	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 18:13	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/14/16 02:05	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:21	PJ1	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		10	364522	12/09/16 23:22	KML	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:29	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:41	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:20	PFK	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 09:59	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502		SMO	TAL CHI
					(Start)	12/09/16 19:35		
					(End)	12/09/16 19:38		
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 18:38	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 23:10	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:25	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:31	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364005	12/07/16 12:00	RMP	TAL CHI
SPLP East	Prep	3010A			364209	12/08/16 14:20	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364518	12/11/16 04:05	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:48	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:23	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 10:00	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502		SMO	TAL CHI
					(Start)	12/09/16 19:38		
					(End)	12/09/16 19:42		
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 19:02	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/13/16 23:39	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:30	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:34	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B34 (0-7)**

**Lab Sample ID: 500-121005-13**

**Date Collected: 12/05/16 16:15**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364005	12/07/16 12:00	RMP	TAL CHI
SPLP East	Prep	3010A			364209	12/08/16 14:20	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364518	12/11/16 04:12	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 18:55	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:26	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 10:02	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	(Start) 12/09/16 19:42 (End) 12/09/16 19:45	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B34 (0-7)**

**Lab Sample ID: 500-121005-13**

**Date Collected: 12/05/16 16:15**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 19:27	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/14/16 02:34	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:34	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 11:36	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (7-14)**

**Lab Sample ID: 500-121005-14**

**Date Collected: 12/05/16 16:20**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364005	12/07/16 12:00	RMP	TAL CHI
SPLP East	Prep	3010A			364209	12/08/16 14:20	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364518	12/11/16 04:19	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 19:02	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:30	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 10:03	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	(Start) 12/09/16 19:45 (End) 12/09/16 19:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B34 (7-14)**

**Lab Sample ID: 500-121005-14**

**Date Collected: 12/05/16 16:20**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 87.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 19:52	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/14/16 00:08	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:39	PJ1	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		10	364522	12/09/16 23:26	KML	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 12:06	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Lab Sample ID: 500-121005-15**

**Date Collected: 12/05/16 16:24**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364005	12/07/16 12:00	RMP	TAL CHI
SPLP East	Prep	3010A			364209	12/08/16 14:20	JNH	TAL CHI
SPLP East	Analysis	6010B		1	364518	12/11/16 04:25	KML	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6010B		1	364518	12/10/16 19:08	KML	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121005-1

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Lab Sample ID: 500-121005-15**

**Date Collected: 12/05/16 16:24**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	3010A			364210	12/08/16 14:21	JNH	TAL CHI
TCLP	Analysis	6020A		1	364634	12/09/16 17:33	PFK	TAL CHI
TCLP	Leach	1311			364018	12/07/16 13:45	RMP	TAL CHI
TCLP	Prep	7470A			364199	12/08/16 12:45	MJD	TAL CHI
TCLP	Analysis	7470A		1	364397	12/09/16 10:05	MJD	TAL CHI
Total/NA	Analysis	9045D		1	364502	(Start) 12/09/16 19:49 (End) 12/09/16 19:52	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	363835	12/06/16 14:55	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B34 (14-20)**

**Lab Sample ID: 500-121005-15**

**Date Collected: 12/05/16 16:24**

**Matrix: Solid**

**Date Received: 12/06/16 10:30**

**Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			363956	12/06/16 13:50	WRE	TAL CHI
Total/NA	Analysis	8260B		1	363925	12/07/16 20:16	DJD	TAL CHI
Total/NA	Prep	3541			364629	12/12/16 09:38	DAK	TAL CHI
Total/NA	Analysis	8270D		1	364920	12/14/16 00:38	GES	TAL CHI
Total/NA	Prep	3050B			364230	12/08/16 15:09	JNH	TAL CHI
Total/NA	Analysis	6010B		1	364449	12/09/16 14:51	PJ1	TAL CHI
Total/NA	Prep	7471B			364021	12/07/16 14:45	MJD	TAL CHI
Total/NA	Analysis	7471B		1	364194	12/08/16 12:09	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: 500-121005-1

## 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: 4/4/12

Client		Client Project #		Preservative		Parameter										Preservative Key		
Project Name		Lab Project #														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 Project #																
Sampler		Lab PM																
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Voc	Svcs	Zn	Mn	Cu	Pb	Cd	Cr	Ni	Co	Mg	Comments
			Date	Time														
1		1314V3-60-B01 (0-6)	12-5-16	12:40	2	S	X	X	X	X	X	X	X	X	X	X	X	64C08
2		1314V3-60-B01 (6-11)	12-5-16	12:45	2	S	X	X	X	X	X	X	X	X	X	X	X	
3		1314V3-60-B06 (0-6)	12-5-16	13:05	2	S	X	X	X	X	X	X	X	X	X	X	X	
4		1314V3-60-B06 (6-12)	12-5-16	13:10	2	S	X	X	X	X	X	X	X	X	X	X	X	
5		1314V3-60-B05 (0-6)	12-5-16	13:35	2	S	X	X	X	X	X	X	X	X	X	X	X	
6		1314V3-60-B05 (6-12)	12-5-16	13:40	2	S	X	X	X	X	X	X	X	X	X	X	X	
7		1314V3-60-B04 (0-5)	12-5-16	13:55	2	S	X	X	X	X	X	X	X	X	X	X	X	
8		1314V3-60-B03 (0-4)	12-5-16	14:10	2	S	X	X	X	X	X	X	X	X	X	X	X	
9		1314V3-60-B03 (4-9)	12-5-16	14:15	2	S	X	X	X	X	X	X	X	X	X	X	X	
10		1314V3-60-B02 (0-7)	12-5-16	14:30	2	S	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
	TA	12-5-16	17:15		TA-CRIT	12/6/16	10:30
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: \_\_\_\_\_  
Shipped: FedEx  
Hand Delivered: \_\_\_\_\_

Matrix Key

- WW - Wastewater
- W - Water
- S - Soil
- SL - Sludge
- MS - Miscellaneous
- OL - Oil
- A - Air
- SE - Sediment
- SO - Soil
- L - Leachate
- WI - Wipe
- DW - Drinking Water
- O - Other

Client Comments

\_\_\_\_\_

Lab Comments:

\_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 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 #: 500-12/005

Chain of Custody Number: ES46-19

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
Project Name		Lab Project #		Date		Time		# of Containers		Matrix	
EE		1009008-0076-01									
I74		SC012744									
Project Location/State		Lab Project #									
Rab Island Curly, IL		SC012744									
Sampler		Lab PM									
S. Cooper		D Wright									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Vol	Spec	Temp	Temp	Temp
11		1314V3-01-B11 (0-8)	12-5-16	1505	2	S	X	X	X	X	X
12		1314V3-01-B11 (8-15)	12-5-16	1515	2	S	X	X	X	X	X

- 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>EE</u>	Date: <u>12/5/16</u>	Time: _____	Received By:	Company: <u>TA-CRT</u>	Date: <u>12/6/16</u>	Time: <u>1030</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: \_\_\_\_\_



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-121005

Chain of Custody Number: EN16-20

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: \_\_\_\_\_

Client <u>EE</u>		Client Project # <u>109998 0046-01</u>		Preservative		Parameter					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 <u>I74</u>		Lab Project # <u>50012744</u>		Parameter		Parameter							
Project Location/State <u>Park Island Com, IL</u>		Lab PM <u>D. Wray</u>		Parameter		Parameter							
Sampler <u>D. Camp</u>		Lab PM		Parameter		Parameter							
Lab ID	MS/MSD	Sample ID	Sampling Date Time		# of Containers	Matrix	Vol	SWOL	Total TAC	Total Spill	Total TAC	Other	Comments
13		1314V3-01-1534(0-7)	12-5-16	1615	2	S	X	X	X	X	X		04126
14		1314V3-01-1534(7-14)	12-5-16	1620	2	S	X	X	X	X	X		
15		1314V3-01-1534(14-20)	12-5-16	1624	2	S	X	X	X	X	X		
<del>                     12-5-16                      [Handwritten scribble]                 </del>													

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>12-5-16</u>	Time <u>1715</u>	Received By <u>Sherrill Scott</u>	Company <u>TA-CHI</u>	Date <u>12/6/16</u>	Time <u>1030</u>
Relinquished By <u>[Signature]</u>	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: \_\_\_\_\_  
 Shipped: Feed 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: 500-121005-1

**Login Number: 121005**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <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: 500-121261-1  
Client Project/Site: IDOT - I-74 - WO 046

For:  
Ecology and Environment, Inc.  
33 West Monroe St.  
Suite 1410  
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:  
12/22/2016 4:38:13 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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: 500-121261-1

**Job ID: 500-121261-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-121261-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 12/9/2016 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.6° C and 3.8° C.

#### GC/MS VOA

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

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 364764 had 1 analyte outside control limits: 3,3'-Dichlorobenzidine. These results have been reported and qualified. 1314V3-02-G01 (500-121261-7) and 1314V3-02-G01D (500-121261-8)

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 365830 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-365830/2-A)

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)

Method(s) 8270D: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 500-364764 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine, 2,4-Dimethylphenol and N-Nitrosodiphenylamine.

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 laboratory blank (LB) for preparation batch 500-365091 and 500-365242 contained Lead above the reporting limit (RL). The samples 1314V3-01-B36 (0-8) (500-121261-1), 1314V3-01-B36 (16-24) (500-121261-3), 1314V3-01-B36 (24-28) (500-121261-4), 1314V3-02-B01 (0-5) (500-121261-5), 1314V3-02-B02 (0-6) (500-121261-10) and 1314V3-02-B02 (6-12)D (500-121261-12) 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) 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.

Method(s) 6020A: The low level check standard (CCVL) recovery associated with batch 500-365454, at line 37, recovered above the upper



# Case Narrative

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

---

## Job ID: 500-121261-1 (Continued)

---

### Laboratory: TestAmerica Chicago (Continued)

control limit for Beryllium at 146% recovery. The samples associated with this CCVL were below the RL 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.

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# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (0-8)**

**Lab Sample ID: 500-121261-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.0052	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.0092	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.60	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.5		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.53	0.096	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.21	0.046	mg/Kg	1	☼	6010B	Total/NA
Boron	0.80	J	2.6	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18		0.11	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	4000	B	11	3.4	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.53	0.091	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.6		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.53	0.11	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	4.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.9		0.26	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2600		5.3	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	140		0.53	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	880		26	4.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.27	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		53	7.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.54		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.26	0.077	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	0.69		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.050	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0036	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	6.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.025	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.73		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038	B	0.018	0.0096	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.041		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0086	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.058		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.054		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.029	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.036	J	0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.014	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.029	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.017	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0087	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.34	J	1.1	0.24	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-01-B36 (8-16) (Continued)

## Lab Sample ID: 500-121261-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	5.3		0.57	0.27	mg/Kg	1		☼	6010B	Total/NA
Barium	48		0.57	0.11	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.50		0.23	0.050	mg/Kg	1		☼	6010B	Total/NA
Boron	3.2		2.9	0.40	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.31		0.11	0.033	mg/Kg	1		☼	6010B	Total/NA
Calcium	21000	B	11	3.7	mg/Kg	1		☼	6010B	Total/NA
Chromium	13	B	0.57	0.099	mg/Kg	1		☼	6010B	Total/NA
Cobalt	6.5		0.29	0.065	mg/Kg	1		☼	6010B	Total/NA
Copper	13		0.57	0.12	mg/Kg	1		☼	6010B	Total/NA
Iron	16000		11	4.4	mg/Kg	1		☼	6010B	Total/NA
Lead	8.7		0.29	0.14	mg/Kg	1		☼	6010B	Total/NA
Magnesium	12000		5.7	2.3	mg/Kg	1		☼	6010B	Total/NA
Manganese	600		0.57	0.11	mg/Kg	1		☼	6010B	Total/NA
Nickel	14		0.57	0.16	mg/Kg	1		☼	6010B	Total/NA
Potassium	1200		29	4.7	mg/Kg	1		☼	6010B	Total/NA
Sodium	92		57	7.6	mg/Kg	1		☼	6010B	Total/NA
Thallium	1.0		0.57	0.28	mg/Kg	1		☼	6010B	Total/NA
Vanadium	24		0.29	0.084	mg/Kg	1		☼	6010B	Total/NA
Zinc	32		1.1	0.36	mg/Kg	1		☼	6010B	Total/NA
Barium	1.1		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.093	J	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0038	J	0.0050	0.0020	mg/L	1			6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1			6010B	TCLP
Lead	0.011		0.0075	0.0075	mg/L	1			6010B	TCLP
Manganese	10		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.13	J	0.50	0.020	mg/L	1			6010B	TCLP
Lead	0.069		0.0075	0.0075	mg/L	1			6010B	SPLP East
Manganese	0.59		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.033	B	0.017	0.0088	mg/Kg	1		☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1			9045D	Total/NA

## Client Sample ID: 1314V3-01-B36 (16-24)

## Lab Sample ID: 500-121261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Antimony	0.30	J	1.1	0.23	mg/Kg	1		☼	6010B	Total/NA
Arsenic	3.4		0.56	0.26	mg/Kg	1		☼	6010B	Total/NA
Barium	52		0.56	0.10	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.39		0.22	0.048	mg/Kg	1		☼	6010B	Total/NA
Boron	2.8		2.8	0.39	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.24		0.11	0.032	mg/Kg	1		☼	6010B	Total/NA
Calcium	38000	B	11	3.6	mg/Kg	1		☼	6010B	Total/NA
Chromium	9.7	B	0.56	0.096	mg/Kg	1		☼	6010B	Total/NA
Cobalt	7.4		0.28	0.063	mg/Kg	1		☼	6010B	Total/NA
Copper	11		0.56	0.12	mg/Kg	1		☼	6010B	Total/NA
Iron	12000		11	4.3	mg/Kg	1		☼	6010B	Total/NA
Lead	6.5		0.28	0.14	mg/Kg	1		☼	6010B	Total/NA
Magnesium	18000		5.6	2.3	mg/Kg	1		☼	6010B	Total/NA
Manganese	370		0.56	0.11	mg/Kg	1		☼	6010B	Total/NA
Nickel	15		0.56	0.15	mg/Kg	1		☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-01-B36 (16-24) (Continued)

## Lab Sample ID: 500-121261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1000		28	4.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	95		56	7.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.68		0.56	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.28	0.081	mg/Kg	1	☼	6010B	Total/NA
Zinc	25		1.1	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0029	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.57		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031	B	0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-01-B36 (24-28)

## Lab Sample ID: 500-121261-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	25		0.57	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.23		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	3.2		2.8	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	47000	B	11	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.5	B	0.57	0.098	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.9		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	6.7		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	7400		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	4.3		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.57	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.2		0.57	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	650		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		57	7.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.42	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.5		0.28	0.083	mg/Kg	1	☼	6010B	Total/NA
Zinc	18		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0030	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.066	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023	B	0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-02-B01 (0-5)

## Lab Sample ID: 500-121261-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.032		0.027	0.012	mg/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-02-B01 (0-5) (Continued)

## Lab Sample ID: 500-121261-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.1		0.71	0.33	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.71	0.13	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.28	0.061	mg/Kg	1	☼	6010B	Total/NA
Boron	25		3.5	0.49	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14		0.14	0.041	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000	B	140	46	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.71	0.12	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1		0.35	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	6.7		0.71	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	7700		14	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	2.5		0.35	0.18	mg/Kg	1	☼	6010B	Total/NA
Magnesium	6000		7.1	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	830		0.71	0.14	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.71	0.19	mg/Kg	1	☼	6010B	Total/NA
Potassium	380		35	5.8	mg/Kg	1	☼	6010B	Total/NA
Sodium	100		71	9.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.71	0.35	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.35	0.10	mg/Kg	1	☼	6010B	Total/NA
Zinc	22		1.4	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	0.087	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Chromium	0.099		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.016	J B	0.022	0.012	mg/Kg	1	☼	7471B	Total/NA
pH	11.6		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-02-B01 (5-10)

## Lab Sample ID: 500-121261-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.020	J	0.039	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.014	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0070	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.039		0.039	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.055		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.44		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.14		0.039	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.53		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.10		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Pyrene - DL	0.82		0.19	0.039	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene - DL	0.30		0.19	0.026	mg/Kg	5	☼	8270D	Total/NA
Chrysene - DL	0.39		0.19	0.053	mg/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	0.39		0.19	0.042	mg/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene - DL	0.11	J	0.19	0.058	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene - DL	0.31		0.19	0.038	mg/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene - DL	0.17	J	0.19	0.063	mg/Kg	5	☼	8270D	Total/NA
Antimony	0.33	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.2		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.59	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.24	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	4.3		2.9	0.41	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31		0.12	0.034	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-02-B01 (5-10) (Continued)

## Lab Sample ID: 500-121261-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	140000	B	120	38	mg/Kg	10	☼	6010B	Total/NA
Chromium	11	B	0.59	0.10	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.6		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.59	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	4.5	mg/Kg	1	☼	6010B	Total/NA
Lead	31		0.29	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3900		5.9	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	600		0.59	0.12	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		29	4.8	mg/Kg	1	☼	6010B	Total/NA
Silver	0.078	J	0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		59	7.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.086	mg/Kg	1	☼	6010B	Total/NA
Zinc	35		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	0.96		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.080	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Iron	2.0		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	9.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.047		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.11	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.45		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	9.8		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-02-G01

## Lab Sample ID: 500-121261-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.00067	J	0.0010	0.00022	mg/L	1		8260B	Total/NA
Diethyl phthalate	0.00048	J	0.0016	0.00029	mg/L	1		8270D	Total/NA
Arsenic	0.0074		0.0010	0.00044	mg/L	1		6020A	Total Recoverable
Barium	0.18		0.0025	0.00084	mg/L	1		6020A	Total Recoverable
Beryllium	0.00072	J ^	0.0010	0.00024	mg/L	1		6020A	Total Recoverable
Boron	0.49		0.050	0.025	mg/L	1		6020A	Total Recoverable
Cadmium	0.0012		0.00050	0.00019	mg/L	1		6020A	Total Recoverable
Calcium	85		0.20	0.11	mg/L	1		6020A	Total Recoverable
Chromium	0.017		0.0050	0.00061	mg/L	1		6020A	Total Recoverable
Cobalt	0.0044		0.0010	0.00019	mg/L	1		6020A	Total Recoverable
Copper	0.029		0.0020	0.00096	mg/L	1		6020A	Total Recoverable
Iron	15	B	0.10	0.026	mg/L	1		6020A	Total Recoverable
Lead	0.51		0.00050	0.00014	mg/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-02-G01 (Continued)

## Lab Sample ID: 500-121261-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	11		0.20	0.083	mg/L	1		6020A	Total Recoverable
Manganese	0.39		0.0025	0.00099	mg/L	1		6020A	Total Recoverable
Nickel	0.013		0.0020	0.00053	mg/L	1		6020A	Total Recoverable
Potassium	9.6		0.50	0.19	mg/L	1		6020A	Total Recoverable
Silver	0.00011	J	0.00050	0.000080	mg/L	1		6020A	Total Recoverable
Sodium	21		0.20	0.088	mg/L	1		6020A	Total Recoverable
Vanadium	0.015		0.0050	0.0022	mg/L	1		6020A	Total Recoverable
Zinc	0.31	B	0.020	0.0046	mg/L	1		6020A	Total Recoverable
Mercury	0.00012	J	0.00020	0.00011	mg/L	1		7470A	Total/NA

## Client Sample ID: 1314V3-02-G01D

## Lab Sample ID: 500-121261-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.00041	J	0.0016	0.00029	mg/L	1		8270D	Total/NA
Phenanthrene	0.00032	J	0.00080	0.00024	mg/L	1		8270D	Total/NA
Arsenic	0.0068		0.0010	0.00044	mg/L	1		6020A	Total Recoverable
Barium	0.17		0.0025	0.00084	mg/L	1		6020A	Total Recoverable
Beryllium	0.00071	J ^	0.0010	0.00024	mg/L	1		6020A	Total Recoverable
Boron	0.46		0.050	0.025	mg/L	1		6020A	Total Recoverable
Cadmium	0.0011		0.00050	0.00019	mg/L	1		6020A	Total Recoverable
Calcium	83		0.20	0.11	mg/L	1		6020A	Total Recoverable
Chromium	0.012		0.0050	0.00061	mg/L	1		6020A	Total Recoverable
Cobalt	0.0039		0.0010	0.00019	mg/L	1		6020A	Total Recoverable
Copper	0.028		0.0020	0.00096	mg/L	1		6020A	Total Recoverable
Iron	14	B	0.10	0.026	mg/L	1		6020A	Total Recoverable
Lead	0.48		0.00050	0.00014	mg/L	1		6020A	Total Recoverable
Magnesium	11		0.20	0.083	mg/L	1		6020A	Total Recoverable
Manganese	0.35		0.0025	0.00099	mg/L	1		6020A	Total Recoverable
Nickel	0.012		0.0020	0.00053	mg/L	1		6020A	Total Recoverable
Potassium	9.1		0.50	0.19	mg/L	1		6020A	Total Recoverable
Silver	0.00010	J	0.00050	0.000080	mg/L	1		6020A	Total Recoverable
Sodium	20		0.20	0.088	mg/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-02-G01D (Continued)

## Lab Sample ID: 500-121261-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	0.015		0.0050	0.0022	mg/L	1		6020A	Total Recoverable
Zinc	0.27	B	0.020	0.0046	mg/L	1		6020A	Total Recoverable

## Client Sample ID: 1314V3-00-TB03

## Lab Sample ID: 500-121261-9

No Detections.

## Client Sample ID: 1314V3-02-B02 (0-6)

## Lab Sample ID: 500-121261-10

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	0.014	J	0.073	0.0067	mg/Kg	1	*	8270D	Total/NA
Acenaphthene	0.0085	J	0.036	0.0065	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.028	J	0.036	0.0051	mg/Kg	1	*	8270D	Total/NA
Fluoranthene	0.035	J	0.036	0.0067	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.032	J	0.036	0.0072	mg/Kg	1	*	8270D	Total/NA
Benzo[a]anthracene	0.021	J	0.036	0.0049	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.026	J	0.036	0.0099	mg/Kg	1	*	8270D	Total/NA
Benzo[b]fluoranthene	0.048		0.036	0.0078	mg/Kg	1	*	8270D	Total/NA
Benzo[k]fluoranthene	0.022	J	0.036	0.011	mg/Kg	1	*	8270D	Total/NA
Benzo[a]pyrene	0.034	J	0.036	0.0070	mg/Kg	1	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.027	J	0.036	0.0094	mg/Kg	1	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.019	J	0.036	0.012	mg/Kg	1	*	8270D	Total/NA
Antimony	0.40	J	1.1	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	6.7		0.55	0.26	mg/Kg	1	*	6010B	Total/NA
Barium	54		0.55	0.10	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.59		0.22	0.048	mg/Kg	1	*	6010B	Total/NA
Boron	1.5	J	2.8	0.39	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.39		0.11	0.032	mg/Kg	1	*	6010B	Total/NA
Calcium	21000	B	11	3.6	mg/Kg	1	*	6010B	Total/NA
Chromium	35	B	0.55	0.095	mg/Kg	1	*	6010B	Total/NA
Cobalt	7.2		0.28	0.063	mg/Kg	1	*	6010B	Total/NA
Copper	27		0.55	0.12	mg/Kg	1	*	6010B	Total/NA
Iron	21000		11	4.3	mg/Kg	1	*	6010B	Total/NA
Lead	22		0.28	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	8200		5.5	2.2	mg/Kg	1	*	6010B	Total/NA
Manganese	340		0.55	0.11	mg/Kg	1	*	6010B	Total/NA
Nickel	61		0.55	0.15	mg/Kg	1	*	6010B	Total/NA
Potassium	780		28	4.5	mg/Kg	1	*	6010B	Total/NA
Sodium	73		55	7.3	mg/Kg	1	*	6010B	Total/NA
Thallium	0.68		0.55	0.27	mg/Kg	1	*	6010B	Total/NA
Vanadium	23		0.28	0.081	mg/Kg	1	*	6010B	Total/NA
Zinc	39		1.1	0.35	mg/Kg	1	*	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0045	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.044	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.11		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: 500-121261-1

## Client Sample ID: 1314V3-02-B02 (0-6) (Continued)

## Lab Sample ID: 500-121261-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.027		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.035	B	0.017	0.0091	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-02-B02 (6-12)

## Lab Sample ID: 500-121261-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0077	J	0.039	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0084	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.016	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.016	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.014	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0089	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.012	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.021	J	0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0091	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.35	J	1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.5		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.56	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.23	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	1.7	J	2.8	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.27		0.11	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000	B	11	3.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	15	B	0.56	0.097	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.4		0.28	0.064	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	20		0.28	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000		5.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.56	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.56	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	740		28	4.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		56	7.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.61		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.28	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0074		0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	4.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.063		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.38	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.28		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038	B	0.018	0.0094	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-02-B02 (6-12)D

## Lab Sample ID: 500-121261-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.013	J	0.038	0.0083	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: 500-121261-1

## Client Sample ID: 1314V3-02-B02 (6-12)D (Continued)

## Lab Sample ID: 500-121261-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.44	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.0		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	50		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.23	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	2.0	J	2.9	0.40	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25		0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000	B	12	3.7	mg/Kg	1	☼	6010B	Total/NA
Chromium	17	B	0.58	0.099	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.6		0.29	0.065	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.58	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		12	4.4	mg/Kg	1	☼	6010B	Total/NA
Lead	20		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.8	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.58	0.11	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	450		29	4.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		58	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.52	J	0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.29	0.084	mg/Kg	1	☼	6010B	Total/NA
Zinc	33		1.2	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	0.79		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	3.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.28		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.036	B	0.019	0.0098	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-06-B01 (0-8)

## Lab Sample ID: 500-121261-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.041		0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.032	J	0.073	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.018	J	0.036	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.018	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.24		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.053		0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.37		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.33		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.20		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.22		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.37		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.14		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.25		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.084		0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.029	J	0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.074		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	2.8	J	5.5	1.1	mg/Kg	5	☼	6010B	Total/NA
Arsenic	14		2.8	1.3	mg/Kg	5	☼	6010B	Total/NA
Barium	31		2.8	0.51	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: 500-121261-1

## Client Sample ID: 1314V3-06-B01 (0-8) (Continued)

## Lab Sample ID: 500-121261-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.27	J	1.1	0.24	mg/Kg	5	☼	6010B	Total/NA
Boron	7.1	J	14	1.9	mg/Kg	5	☼	6010B	Total/NA
Cadmium	0.42	J	0.55	0.16	mg/Kg	5	☼	6010B	Total/NA
Calcium	4500	B	55	18	mg/Kg	5	☼	6010B	Total/NA
Chromium	94	B	2.8	0.48	mg/Kg	5	☼	6010B	Total/NA
Cobalt	10		1.4	0.31	mg/Kg	5	☼	6010B	Total/NA
Copper	66		2.8	0.60	mg/Kg	5	☼	6010B	Total/NA
Iron	95000		55	21	mg/Kg	5	☼	6010B	Total/NA
Lead	110		1.4	0.69	mg/Kg	5	☼	6010B	Total/NA
Magnesium	1100		28	11	mg/Kg	5	☼	6010B	Total/NA
Manganese	850		2.8	0.55	mg/Kg	5	☼	6010B	Total/NA
Nickel	310		2.8	0.75	mg/Kg	5	☼	6010B	Total/NA
Potassium	370		140	23	mg/Kg	5	☼	6010B	Total/NA
Selenium	2.2	J	2.8	1.4	mg/Kg	5	☼	6010B	Total/NA
Sodium	85	J	280	37	mg/Kg	5	☼	6010B	Total/NA
Thallium	2.8		2.8	1.4	mg/Kg	5	☼	6010B	Total/NA
Vanadium	34		1.4	0.40	mg/Kg	5	☼	6010B	Total/NA
Zinc	84		5.5	1.8	mg/Kg	5	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Chromium	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Cobalt	0.086		0.025	0.010	mg/L	1		6010B	TCLP
Iron	86		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	9.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	1.2		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.39	J	0.50	0.020	mg/L	1		6010B	TCLP
Iron	11		0.40	0.20	mg/L	1		6010B	SPLP East
Manganese	0.059		0.025	0.010	mg/L	1		6010B	SPLP East
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027	B	0.019	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-06-B02 (0-8)

## Lab Sample ID: 500-121261-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.026	J	0.037	0.0057	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.022	J	0.075	0.0068	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.022	J	0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.011	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0086	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.24		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.060		0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.1		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	2.0		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	1.0		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.96		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1.3		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.50		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	1.3		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.27		0.037	0.0096	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: 500-121261-1

## Client Sample ID: 1314V3-06-B02 (0-8) (Continued)

## Lab Sample ID: 500-121261-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	0.11		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.28		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	1.3	J	5.5	1.1	mg/Kg	5	☼	6010B	Total/NA
Arsenic	7.7		2.8	1.3	mg/Kg	5	☼	6010B	Total/NA
Barium	62		2.8	0.51	mg/Kg	5	☼	6010B	Total/NA
Beryllium	0.58	J	1.1	0.24	mg/Kg	5	☼	6010B	Total/NA
Boron	11	J	14	1.9	mg/Kg	5	☼	6010B	Total/NA
Cadmium	0.59		0.55	0.16	mg/Kg	5	☼	6010B	Total/NA
Calcium	13000	B	55	18	mg/Kg	5	☼	6010B	Total/NA
Chromium	27	B	2.8	0.48	mg/Kg	5	☼	6010B	Total/NA
Cobalt	5.8		1.4	0.31	mg/Kg	5	☼	6010B	Total/NA
Copper	29		2.8	0.60	mg/Kg	5	☼	6010B	Total/NA
Iron	37000		55	21	mg/Kg	5	☼	6010B	Total/NA
Lead	82		1.4	0.69	mg/Kg	5	☼	6010B	Total/NA
Magnesium	2200		28	11	mg/Kg	5	☼	6010B	Total/NA
Manganese	660		2.8	0.55	mg/Kg	5	☼	6010B	Total/NA
Nickel	49		2.8	0.75	mg/Kg	5	☼	6010B	Total/NA
Potassium	600		140	23	mg/Kg	5	☼	6010B	Total/NA
Sodium	140	J	280	36	mg/Kg	5	☼	6010B	Total/NA
Thallium	1.5	J	2.8	1.4	mg/Kg	5	☼	6010B	Total/NA
Vanadium	23		1.4	0.40	mg/Kg	5	☼	6010B	Total/NA
Zinc	160		5.5	1.7	mg/Kg	5	☼	6010B	Total/NA
Barium	0.40	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.077	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0053		0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.49	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.43	B	0.020	0.010	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

## Client Sample ID: 1314V3-06-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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-06-B03 (0-4) (Continued)

## Lab Sample ID: 500-121261-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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

## 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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-11-B03 (0-1) (Continued)

## Lab Sample ID: 500-121261-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-11-B03 (0-1)D (Continued)

## Lab Sample ID: 500-121261-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Client Sample ID: 1314V3-11-B02 (0-1) (Continued)

## Lab Sample ID: 500-121261-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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
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

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-11-B01 (0-1) (Continued)**

**Lab Sample ID: 500-121261-19**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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



# Method Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

Method	Method Description	Protocol	Laboratory
8260B	VOC	SW846	TAL CHI
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	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
7470A	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: 500-121261-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-121261-1	1314V3-01-B36 (0-8)	Solid	12/08/16 14:30	12/09/16 10:00
500-121261-2	1314V3-01-B36 (8-16)	Solid	12/08/16 14:35	12/09/16 10:00
500-121261-3	1314V3-01-B36 (16-24)	Solid	12/08/16 14:40	12/09/16 10:00
500-121261-4	1314V3-01-B36 (24-28)	Solid	12/08/16 15:10	12/09/16 10:00
500-121261-5	1314V3-02-B01 (0-5)	Solid	12/08/16 08:40	12/09/16 10:00
500-121261-6	1314V3-02-B01 (5-10)	Solid	12/08/16 08:45	12/09/16 10:00
500-121261-7	1314V3-02-G01	Water	12/08/16 09:15	12/09/16 10:00
500-121261-8	1314V3-02-G01D	Water	12/08/16 09:15	12/09/16 10:00
500-121261-9	1314V3-00-TB03	Water	12/08/16 00:00	12/09/16 10:00
500-121261-10	1314V3-02-B02 (0-6)	Solid	12/08/16 10:45	12/09/16 10:00
500-121261-11	1314V3-02-B02 (6-12)	Solid	12/08/16 10:50	12/09/16 10:00
500-121261-12	1314V3-02-B02 (6-12)D	Solid	12/08/16 10:50	12/09/16 10:00
500-121261-13	1314V3-06-B01 (0-8)	Solid	12/08/16 11:20	12/09/16 10:00
500-121261-14	1314V3-06-B02 (0-8)	Solid	12/08/16 11:50	12/09/16 10:00
500-121261-15	1314V3-06-B03 (0-4)	Solid	12/08/16 12:20	12/09/16 10:00
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

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (0-8)**

**Lab Sample ID: 500-121261-1**

**Date Collected: 12/08/16 14:30**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.7**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Vinyl acetate	<0.0047		0.0047	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 120	12/09/16 17:53	12/11/16 12:48	1
Dibromofluoromethane	102		75 - 120	12/09/16 17:53	12/11/16 12:48	1
1,2-Dichloroethane-d4 (Surr)	105		69 - 134	12/09/16 17:53	12/11/16 12:48	1
Toluene-d8 (Surr)	101		75 - 123	12/09/16 17:53	12/11/16 12:48	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (0-8)**

**Lab Sample ID: 500-121261-1**

**Date Collected: 12/08/16 14:30**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.7**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dinitrophenol	<0.75	*	0.75	0.66	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
<b>Benzo[a]anthracene</b>	<b>0.0052</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (0-8)**

**Lab Sample ID: 500-121261-1**

**Date Collected: 12/08/16 14:30**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.7**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
<b>Benzo[b]fluoranthene</b>	<b>0.0092</b>	<b>J</b>	0.037	0.0081	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 12:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		40 - 130	12/19/16 16:12	12/20/16 12:43	1
Phenol-d5	106		36 - 123	12/19/16 16:12	12/20/16 12:43	1
Nitrobenzene-d5	88		33 - 124	12/19/16 16:12	12/20/16 12:43	1
2-Fluorobiphenyl	87		42 - 115	12/19/16 16:12	12/20/16 12:43	1
2,4,6-Tribromophenol	67		25 - 130	12/19/16 16:12	12/20/16 12:43	1
Terphenyl-d14	104		25 - 150	12/19/16 16:12	12/20/16 12:43	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.60</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Arsenic</b>	<b>4.5</b>		0.53	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Barium</b>	<b>31</b>		0.53	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Beryllium</b>	<b>0.52</b>		0.21	0.046	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Boron</b>	<b>0.80</b>	<b>J</b>	2.6	0.37	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Cadmium</b>	<b>0.18</b>		0.11	0.031	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Calcium</b>	<b>4000</b>	<b>B</b>	11	3.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Chromium</b>	<b>12</b>	<b>B</b>	0.53	0.091	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Cobalt</b>	<b>5.6</b>		0.26	0.060	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Copper</b>	<b>13</b>		0.53	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Iron</b>	<b>15000</b>		11	4.1	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Lead</b>	<b>7.9</b>		0.26	0.13	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Magnesium</b>	<b>2600</b>		5.3	2.1	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Manganese</b>	<b>140</b>		0.53	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Nickel</b>	<b>12</b>		0.53	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Potassium</b>	<b>880</b>		26	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Selenium</b>	<b>0.27</b>	<b>J</b>	0.53	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Sodium</b>	<b>370</b>		53	7.0	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Thallium</b>	<b>0.54</b>		0.53	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Vanadium</b>	<b>15</b>		0.26	0.077	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1
<b>Zinc</b>	<b>30</b>		1.1	0.33	mg/Kg	☼	12/14/16 15:50	12/16/16 21:07	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.69</b>		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:35	1
<b>Boron</b>	<b>0.050</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:35	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (0-8)**

**Lab Sample ID: 500-121261-1**

Date Collected: 12/08/16 14:30

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 87.7

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0036</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
<b>Cobalt</b>	<b>0.037</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
<b>Manganese</b>	<b>6.7</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
<b>Nickel</b>	<b>0.039</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:35	1
<b>Zinc</b>	<b>0.025</b>	<b>J</b>	0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:35	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.73</b>		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 04:59	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 18:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:06	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 10:41	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.038</b>	<b>B</b>	0.018	0.0096	mg/Kg	☼	12/14/16 16:00	12/15/16 12:00	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.4</b>		0.2	0.2	SU	-		12/14/16 15:25	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

**Date Collected: 12/08/16 14:35**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.0**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/09/16 17:53	12/11/16 13:13	1
Dibromofluoromethane	96		75 - 120	12/09/16 17:53	12/11/16 13:13	1
1,2-Dichloroethane-d4 (Surr)	101		69 - 134	12/09/16 17:53	12/11/16 13:13	1
Toluene-d8 (Surr)	102		75 - 123	12/09/16 17:53	12/11/16 13:13	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

**Date Collected: 12/08/16 14:35**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Phenanthrene</b>	<b>0.041</b>		0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Anthracene</b>	<b>0.0086</b>	<b>J</b>	0.038	0.0064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Fluoranthene</b>	<b>0.058</b>		0.038	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Pyrene</b>	<b>0.054</b>		0.038	0.0077	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Benzo[a]anthracene</b>	<b>0.029</b>	<b>J</b>	0.038	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

**Date Collected: 12/08/16 14:35**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.026</b>	<b>J</b>	0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Benzo[b]fluoranthene</b>	<b>0.036</b>	<b>J</b>	0.038	0.0083	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Benzo[k]fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Benzo[a]pyrene</b>	<b>0.029</b>	<b>J</b>	0.038	0.0075	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.017</b>	<b>J</b>	0.038	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0087</b>	<b>J</b>	0.038	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
<b>Benzo[g,h,i]perylene</b>	<b>0.013</b>	<b>J</b>	0.038	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		40 - 130	12/19/16 16:12	12/20/16 13:09	1
Phenol-d5	83		36 - 123	12/19/16 16:12	12/20/16 13:09	1
Nitrobenzene-d5	82		33 - 124	12/19/16 16:12	12/20/16 13:09	1
2-Fluorobiphenyl	78		42 - 115	12/19/16 16:12	12/20/16 13:09	1
2,4,6-Tribromophenol	74		25 - 130	12/19/16 16:12	12/20/16 13:09	1
Terphenyl-d14	96		25 - 150	12/19/16 16:12	12/20/16 13:09	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.34</b>	<b>J</b>	1.1	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Arsenic</b>	<b>5.3</b>		0.57	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Barium</b>	<b>48</b>		0.57	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Beryllium</b>	<b>0.50</b>		0.23	0.050	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Boron</b>	<b>3.2</b>		2.9	0.40	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Cadmium</b>	<b>0.31</b>		0.11	0.033	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Calcium</b>	<b>21000</b>	<b>B</b>	11	3.7	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.57	0.099	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Cobalt</b>	<b>6.5</b>		0.29	0.065	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Copper</b>	<b>13</b>		0.57	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Iron</b>	<b>16000</b>		11	4.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Lead</b>	<b>8.7</b>		0.29	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Magnesium</b>	<b>12000</b>		5.7	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Manganese</b>	<b>600</b>		0.57	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Nickel</b>	<b>14</b>		0.57	0.16	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Potassium</b>	<b>1200</b>		29	4.7	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Sodium</b>	<b>92</b>		57	7.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Thallium</b>	<b>1.0</b>		0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Vanadium</b>	<b>24</b>		0.29	0.084	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1
<b>Zinc</b>	<b>32</b>		1.1	0.36	mg/Kg	☼	12/14/16 15:50	12/16/16 21:14	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>1.1</b>		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:39	1
<b>Boron</b>	<b>0.093</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:39	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

**Date Collected: 12/08/16 14:35**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.0**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0038</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
<b>Cobalt</b>	<b>0.027</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
<b>Lead</b>	<b>0.011</b>		0.0075	0.0075	mg/L	-	12/19/16 08:53	12/19/16 22:10	1
<b>Manganese</b>	<b>10</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
<b>Nickel</b>	<b>0.030</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:39	1
<b>Zinc</b>	<b>0.13</b>	<b>J</b>	0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:39	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.069</b>		0.0075	0.0075	mg/L	-	12/14/16 14:09	12/16/16 05:06	1
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 05:06	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 18:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:11	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 10:46	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.033</b>	<b>B</b>	0.017	0.0088	mg/Kg	☼	12/14/16 16:00	12/15/16 12:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.3</b>		0.2	0.2	SU	-		12/14/16 15:30	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (16-24)**

**Lab Sample ID: 500-121261-3**

**Date Collected: 12/08/16 14:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.6**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 120	12/09/16 17:53	12/11/16 13:38	1
Dibromofluoromethane	99		75 - 120	12/09/16 17:53	12/11/16 13:38	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/09/16 17:53	12/11/16 13:38	1
Toluene-d8 (Surr)	101		75 - 123	12/09/16 17:53	12/11/16 13:38	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (16-24)**

**Lab Sample ID: 500-121261-3**

**Date Collected: 12/08/16 14:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dinitrophenol	<0.75	*	0.75	0.65	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (16-24)**

**Lab Sample ID: 500-121261-3**

**Date Collected: 12/08/16 14:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		40 - 130	12/19/16 16:12	12/20/16 13:34	1
Phenol-d5	104		36 - 123	12/19/16 16:12	12/20/16 13:34	1
Nitrobenzene-d5	87		33 - 124	12/19/16 16:12	12/20/16 13:34	1
2-Fluorobiphenyl	90		42 - 115	12/19/16 16:12	12/20/16 13:34	1
2,4,6-Tribromophenol	67		25 - 130	12/19/16 16:12	12/20/16 13:34	1
Terphenyl-d14	107		25 - 150	12/19/16 16:12	12/20/16 13:34	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Arsenic	3.4		0.56	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Barium	52		0.56	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Beryllium	0.39		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Boron	2.8		2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Cadmium	0.24		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Calcium	38000	B	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Chromium	9.7	B	0.56	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Cobalt	7.4		0.28	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Copper	11		0.56	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Iron	12000		11	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Lead	6.5		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Magnesium	18000		5.6	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Manganese	370		0.56	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Nickel	15		0.56	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Potassium	1000		28	4.5	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Sodium	95		56	7.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Thallium	0.68		0.56	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Vanadium	14		0.28	0.081	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1
Zinc	25		1.1	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 21:21	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.55		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:44	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:44	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (16-24)**

**Lab Sample ID: 500-121261-3**

**Date Collected: 12/08/16 14:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0029</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
<b>Cobalt</b>	<b>0.015</b>	<b>J</b>	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
<b>Manganese</b>	<b>3.4</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
<b>Nickel</b>	<b>0.022</b>	<b>J</b>	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:44	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:44	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.57</b>		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 05:13	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 18:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:15	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 10:48	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.031</b>	<b>B</b>	0.019	0.0098	mg/Kg	☼	12/14/16 16:00	12/15/16 13:12	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.5</b>		0.2	0.2	SU	-		12/14/16 15:33	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (24-28)**

**Lab Sample ID: 500-121261-4**

**Date Collected: 12/08/16 15:10**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 84.7**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/09/16 17:53	12/12/16 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 120	12/09/16 17:53	12/12/16 15:31	1
Dibromofluoromethane	97		75 - 120	12/09/16 17:53	12/12/16 15:31	1
1,2-Dichloroethane-d4 (Surr)	103		69 - 134	12/09/16 17:53	12/12/16 15:31	1
Toluene-d8 (Surr)	105		75 - 123	12/09/16 17:53	12/12/16 15:31	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (24-28)**

**Lab Sample ID: 500-121261-4**

**Date Collected: 12/08/16 15:10**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 84.7**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dinitrophenol	<0.76	*	0.76	0.66	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (24-28)**

**Lab Sample ID: 500-121261-4**

**Date Collected: 12/08/16 15:10**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 84.7**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 13:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	95		40 - 130	12/19/16 16:12	12/20/16 13:59	1
Phenol-d5	91		36 - 123	12/19/16 16:12	12/20/16 13:59	1
Nitrobenzene-d5	85		33 - 124	12/19/16 16:12	12/20/16 13:59	1
2-Fluorobiphenyl	83		42 - 115	12/19/16 16:12	12/20/16 13:59	1
2,4,6-Tribromophenol	61		25 - 130	12/19/16 16:12	12/20/16 13:59	1
Terphenyl-d14	96		25 - 150	12/19/16 16:12	12/20/16 13:59	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Arsenic</b>	<b>3.3</b>		0.57	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Barium</b>	<b>25</b>		0.57	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Beryllium</b>	<b>0.23</b>		0.23	0.049	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Boron</b>	<b>3.2</b>		2.8	0.40	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Cadmium</b>	<b>0.15</b>		0.11	0.033	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Calcium</b>	<b>47000</b>	<b>B</b>	11	3.7	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Chromium</b>	<b>5.5</b>	<b>B</b>	0.57	0.098	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Cobalt</b>	<b>2.9</b>		0.28	0.064	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Copper</b>	<b>6.7</b>		0.57	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Iron</b>	<b>7400</b>		11	4.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Lead</b>	<b>4.3</b>		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Magnesium</b>	<b>25000</b>		5.7	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Manganese</b>	<b>250</b>		0.57	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Nickel</b>	<b>7.2</b>		0.57	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Potassium</b>	<b>650</b>		28	4.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Selenium	<0.57		0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
Silver	<0.28		0.28	0.067	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Sodium</b>	<b>200</b>		57	7.5	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Thallium</b>	<b>0.42</b>	<b>J</b>	0.57	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Vanadium</b>	<b>9.5</b>		0.28	0.083	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1
<b>Zinc</b>	<b>18</b>		1.1	0.36	mg/Kg	☼	12/14/16 15:50	12/16/16 21:28	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.54</b>		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:49	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:49	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (24-28)**

**Lab Sample ID: 500-121261-4**

**Date Collected: 12/08/16 15:10**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 84.7**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0030</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
<b>Cobalt</b>	<b>0.015</b>	<b>J</b>	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
<b>Manganese</b>	<b>3.4</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
<b>Nickel</b>	<b>0.023</b>	<b>J</b>	0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:49	1
<b>Zinc</b>	<b>0.066</b>	<b>J</b>	0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:49	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.13</b>		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 18:21	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/15/16 08:57	12/15/16 18:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:20	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/15/16 13:00	12/16/16 10:49	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.023</b>	<b>B</b>	0.019	0.010	mg/Kg	☼	12/14/16 16:00	12/15/16 12:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.2</b>		0.2	0.2	SU	-		12/14/16 15:36	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (0-5)**

**Lab Sample ID: 500-121261-5**

Date Collected: 12/08/16 08:40

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 68.1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.032		0.027	0.012	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Benzene	<0.0027		0.0027	0.00068	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Bromodichloromethane	<0.0027		0.0027	0.00054	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Bromoform	<0.0027		0.0027	0.00078	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Bromomethane	<0.0067		0.0067	0.0025	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
2-Butanone (MEK)	<0.0067		0.0067	0.0030	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Carbon disulfide	<0.0067		0.0067	0.0014	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Carbon tetrachloride	<0.0027		0.0027	0.00077	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Chlorobenzene	<0.0027		0.0027	0.00098	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Chloroethane	<0.0067		0.0067	0.0020	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Chloroform	<0.0027		0.0027	0.00092	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Chloromethane	<0.0067		0.0067	0.0027	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
cis-1,2-Dichloroethene	<0.0027		0.0027	0.00074	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
cis-1,3-Dichloropropene	<0.0027		0.0027	0.00080	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Dibromochloromethane	<0.0027		0.0027	0.00087	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,1-Dichloroethane	<0.0027		0.0027	0.00091	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,2-Dichloroethane	<0.0067		0.0067	0.0021	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,1-Dichloroethene	<0.0027		0.0027	0.00092	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,2-Dichloropropane	<0.0027		0.0027	0.00069	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,3-Dichloropropane, Total	<0.0027		0.0027	0.00093	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Ethylbenzene	<0.0027		0.0027	0.0013	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
2-Hexanone	<0.0067		0.0067	0.0021	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Methylene Chloride	<0.0067		0.0067	0.0026	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
4-Methyl-2-pentanone (MIBK)	<0.0067		0.0067	0.0020	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Methyl tert-butyl ether	<0.0027		0.0027	0.00078	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Styrene	<0.0027		0.0027	0.00080	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,1,2,2-Tetrachloroethane	<0.0027		0.0027	0.00085	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Tetrachloroethene	<0.0027		0.0027	0.00091	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Toluene	<0.0027		0.0027	0.00067	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
trans-1,2-Dichloroethene	<0.0027		0.0027	0.0012	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
trans-1,3-Dichloropropene	<0.0027		0.0027	0.00093	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,1,1-Trichloroethane	<0.0027		0.0027	0.00089	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
1,1,2-Trichloroethane	<0.0027		0.0027	0.0011	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Trichloroethene	<0.0027		0.0027	0.00090	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Vinyl acetate	<0.0067		0.0067	0.0023	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Vinyl chloride	<0.0027		0.0027	0.0012	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1
Xylenes, Total	<0.0053		0.0053	0.00085	mg/Kg	☼	12/08/16 08:40	12/12/16 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 120	12/08/16 08:40	12/12/16 15:56	1
Dibromofluoromethane	87		75 - 120	12/08/16 08:40	12/12/16 15:56	1
1,2-Dichloroethane-d4 (Surr)	111		69 - 134	12/08/16 08:40	12/12/16 15:56	1
Toluene-d8 (Surr)	104		75 - 123	12/08/16 08:40	12/12/16 15:56	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.24		0.24	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Bis(2-chloroethyl)ether	<0.24		0.24	0.072	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
1,3-Dichlorobenzene	<0.24		0.24	0.054	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
1,4-Dichlorobenzene	<0.24		0.24	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (0-5)**

**Lab Sample ID: 500-121261-5**

**Date Collected: 12/08/16 08:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 68.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.24		0.24	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2-Methylphenol	<0.24		0.24	0.077	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,2'-oxybis[1-chloropropane]	<0.24		0.24	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
N-Nitrosodi-n-propylamine	<0.097		0.097	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Hexachloroethane	<0.24		0.24	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2-Chlorophenol	<0.24		0.24	0.082	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Nitrobenzene	<0.048		0.048	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Bis(2-chloroethoxy)methane	<0.24		0.24	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
1,2,4-Trichlorobenzene	<0.24		0.24	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Isophorone	<0.24		0.24	0.054	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,4-Dimethylphenol	<0.48		0.48	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Hexachlorobutadiene	<0.24		0.24	0.076	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Naphthalene	<0.048		0.048	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,4-Dichlorophenol	<0.48		0.48	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
4-Chloroaniline	<0.97		0.97	0.23	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,4,6-Trichlorophenol	<0.48		0.48	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,4,5-Trichlorophenol	<0.48		0.48	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Hexachlorocyclopentadiene	<0.97		0.97	0.28	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2-Methylnaphthalene	<0.097		0.097	0.0089	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2-Nitroaniline	<0.24		0.24	0.065	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2-Chloronaphthalene	<0.24		0.24	0.053	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
4-Chloro-3-methylphenol	<0.48		0.48	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,6-Dinitrotoluene	<0.24		0.24	0.095	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2-Nitrophenol	<0.48		0.48	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
3-Nitroaniline	<0.48		0.48	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Dimethyl phthalate	<0.24		0.24	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,4-Dinitrophenol	<0.97	*	0.97	0.85	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Acenaphthylene	<0.048		0.048	0.0064	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
2,4-Dinitrotoluene	<0.24		0.24	0.077	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Acenaphthene	<0.048		0.048	0.0087	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Dibenzofuran	<0.24		0.24	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
4-Nitrophenol	<0.97		0.97	0.46	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Fluorene	<0.048		0.048	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
4-Nitroaniline	<0.48		0.48	0.20	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
4-Bromophenyl phenyl ether	<0.24		0.24	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Hexachlorobenzene	<0.097		0.097	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Diethyl phthalate	<0.24		0.24	0.082	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
4-Chlorophenyl phenyl ether	<0.24		0.24	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Pentachlorophenol	<0.97		0.97	0.77	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
N-Nitrosodiphenylamine	<0.24		0.24	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
4,6-Dinitro-2-methylphenol	<0.97		0.97	0.39	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Phenanthrene	<0.048		0.048	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Anthracene	<0.048		0.048	0.0081	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Carbazole	<0.24		0.24	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Di-n-butyl phthalate	<0.24		0.24	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Fluoranthene	<0.048		0.048	0.0089	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Pyrene	<0.048		0.048	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Butyl benzyl phthalate	<0.24		0.24	0.092	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Benzo[a]anthracene	<0.048		0.048	0.0065	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (0-5)**

**Lab Sample ID: 500-121261-5**

**Date Collected: 12/08/16 08:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 68.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.048		0.048	0.013	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
3,3'-Dichlorobenzidine	<0.24		0.24	0.067	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Bis(2-ethylhexyl) phthalate	<0.24		0.24	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Di-n-octyl phthalate	<0.24		0.24	0.079	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Benzo[b]fluoranthene	<0.048		0.048	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Benzo[k]fluoranthene	<0.048		0.048	0.014	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Benzo[a]pyrene	<0.048		0.048	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Dibenz(a,h)anthracene	<0.048		0.048	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
Benzo[g,h,i]perylene	<0.048		0.048	0.016	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1
3 & 4 Methylphenol	<0.24		0.24	0.080	mg/Kg	☼	12/19/16 16:12	12/20/16 14:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	74		40 - 130	12/19/16 16:12	12/20/16 14:24	1
Phenol-d5	89		36 - 123	12/19/16 16:12	12/20/16 14:24	1
Nitrobenzene-d5	78		33 - 124	12/19/16 16:12	12/20/16 14:24	1
2-Fluorobiphenyl	76		42 - 115	12/19/16 16:12	12/20/16 14:24	1
2,4,6-Tribromophenol	46		25 - 130	12/19/16 16:12	12/20/16 14:24	1
Terphenyl-d14	90		25 - 150	12/19/16 16:12	12/20/16 14:24	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.4		1.4	0.29	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Arsenic</b>	<b>2.1</b>		0.71	0.33	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Barium</b>	<b>38</b>		0.71	0.13	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Beryllium</b>	<b>0.57</b>		0.28	0.061	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Boron</b>	<b>25</b>		3.5	0.49	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Cadmium</b>	<b>0.14</b>		0.14	0.041	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Calcium</b>	<b>110000</b>	<b>B</b>	140	46	mg/Kg	☼	12/14/16 15:50	12/18/16 20:31	10
<b>Chromium</b>	<b>15</b>	<b>B</b>	0.71	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Cobalt</b>	<b>5.1</b>		0.35	0.080	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Copper</b>	<b>6.7</b>		0.71	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Iron</b>	<b>7700</b>		14	5.5	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Lead</b>	<b>2.5</b>		0.35	0.18	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Magnesium</b>	<b>6000</b>		7.1	2.9	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Manganese</b>	<b>830</b>		0.71	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Nickel</b>	<b>14</b>		0.71	0.19	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Potassium</b>	<b>380</b>		35	5.8	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
Selenium	<0.71		0.71	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
Silver	<0.35		0.35	0.083	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Sodium</b>	<b>100</b>		71	9.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Thallium</b>	<b>1.2</b>		0.71	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Vanadium</b>	<b>18</b>		0.35	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1
<b>Zinc</b>	<b>22</b>		1.4	0.45	mg/Kg	☼	12/14/16 15:50	12/16/16 21:34	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.087</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:54	1
<b>Boron</b>	<b>0.12</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:54	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (0-5)**

**Lab Sample ID: 500-121261-5**

**Date Collected: 12/08/16 08:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 68.1**

**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 08:57	12/15/16 23:54	1
<b>Chromium</b>	<b>0.099</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Manganese	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Nickel	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/15/16 23:54	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/15/16 08:57	12/15/16 23:54	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	-	12/15/16 08:57	12/15/16 18:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:25	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	-	12/15/16 13:00	12/16/16 10:51	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	<b>J B</b>	0.022	0.012	mg/Kg	☼	12/14/16 16:00	12/15/16 12:21	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>11.6</b>		0.2	0.2	SU	-		12/14/16 15:39	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (5-10)**

**Lab Sample ID: 500-121261-6**

Date Collected: 12/08/16 08:45

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 82.9

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/09/16 17:53	12/11/16 14:52	1
Dibromofluoromethane	97		75 - 120	12/09/16 17:53	12/11/16 14:52	1
1,2-Dichloroethane-d4 (Surr)	108		69 - 134	12/09/16 17:53	12/11/16 14:52	1
Toluene-d8 (Surr)	102		75 - 123	12/09/16 17:53	12/11/16 14:52	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	☼	12/19/16 16:12	12/20/16 21:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (5-10)**

**Lab Sample ID: 500-121261-6**

**Date Collected: 12/08/16 08:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 82.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Naphthalene</b>	<b>0.020</b>	<b>J</b>	0.039	0.0060	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>2-Methylnaphthalene</b>	<b>0.014</b>	<b>J</b>	0.079	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Acenaphthylene</b>	<b>0.0070</b>	<b>J</b>	0.039	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Acenaphthene</b>	<b>0.039</b>		0.039	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Fluorene</b>	<b>0.055</b>		0.039	0.0055	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Phenanthrene</b>	<b>0.44</b>		0.039	0.0055	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Anthracene</b>	<b>0.14</b>		0.039	0.0066	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Fluoranthene</b>	<b>0.53</b>		0.039	0.0073	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (5-10)**

**Lab Sample ID: 500-121261-6**

**Date Collected: 12/08/16 08:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 82.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.10</b>		0.039	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/19/16 16:12	12/20/16 21:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		40 - 130				12/19/16 16:12	12/20/16 21:06	1
Phenol-d5	89		36 - 123				12/19/16 16:12	12/20/16 21:06	1
Nitrobenzene-d5	76		33 - 124				12/19/16 16:12	12/20/16 21:06	1
2-Fluorobiphenyl	75		42 - 115				12/19/16 16:12	12/20/16 21:06	1
2,4,6-Tribromophenol	68		25 - 130				12/19/16 16:12	12/20/16 21:06	1
Terphenyl-d14	144		25 - 150				12/19/16 16:12	12/20/16 21:06	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Pyrene</b>	<b>0.82</b>		0.19	0.039	mg/Kg	☼	12/19/16 16:12	12/22/16 02:06	5
<b>Benzo[a]anthracene</b>	<b>0.30</b>		0.19	0.026	mg/Kg	☼	12/19/16 16:12	12/22/16 02:06	5
<b>Chrysene</b>	<b>0.39</b>		0.19	0.053	mg/Kg	☼	12/19/16 16:12	12/22/16 02:06	5
<b>Benzo[b]fluoranthene</b>	<b>0.39</b>		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/22/16 02:06	5
<b>Benzo[k]fluoranthene</b>	<b>0.11</b>	J	0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/22/16 02:06	5
<b>Benzo[a]pyrene</b>	<b>0.31</b>		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/22/16 02:06	5
<b>Benzo[g,h,i]perylene</b>	<b>0.17</b>	J	0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/22/16 02:06	5

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.33</b>	J	1.2	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Arsenic</b>	<b>4.2</b>		0.59	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Barium</b>	<b>61</b>		0.59	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Beryllium</b>	<b>0.43</b>		0.24	0.051	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Boron</b>	<b>4.3</b>		2.9	0.41	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Cadmium</b>	<b>0.31</b>		0.12	0.034	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Calcium</b>	<b>140000</b>	B	120	38	mg/Kg	☼	12/14/16 15:50	12/18/16 20:35	10
<b>Chromium</b>	<b>11</b>	B	0.59	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Cobalt</b>	<b>8.6</b>		0.29	0.067	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Copper</b>	<b>13</b>		0.59	0.13	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Iron</b>	<b>14000</b>		12	4.5	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Lead</b>	<b>31</b>		0.29	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Magnesium</b>	<b>3900</b>		5.9	2.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Manganese</b>	<b>600</b>		0.59	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Nickel</b>	<b>19</b>		0.59	0.16	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Potassium</b>	<b>1300</b>		29	4.8	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
Selenium	<0.59		0.59	0.29	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Silver</b>	<b>0.078</b>	J	0.29	0.069	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Sodium</b>	<b>170</b>		59	7.8	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Thallium</b>	<b>0.80</b>		0.59	0.29	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Vanadium</b>	<b>18</b>		0.29	0.086	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1
<b>Zinc</b>	<b>35</b>		1.2	0.37	mg/Kg	☼	12/14/16 15:50	12/16/16 21:41	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (5-10)**

**Lab Sample ID: 500-121261-6**

Date Collected: 12/08/16 08:45

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 82.9

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.96</b>		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:59	1
<b>Boron</b>	<b>0.080</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/15/16 08:57	12/15/16 23:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:59	1
<b>Cobalt</b>	<b>0.033</b>		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:59	1
<b>Iron</b>	<b>2.0</b>		0.40	0.20	mg/L		12/15/16 08:57	12/15/16 23:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/19/16 08:53	12/19/16 22:14	1
<b>Manganese</b>	<b>9.6</b>		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:59	1
<b>Nickel</b>	<b>0.047</b>		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/15/16 23:59	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:59	1
<b>Zinc</b>	<b>0.11</b>	<b>J</b>	0.50	0.020	mg/L		12/15/16 08:57	12/15/16 23:59	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.45</b>		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 05:33	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		12/15/16 08:57	12/15/16 18:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 18:29	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		12/15/16 13:00	12/16/16 10:52	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.12</b>	<b>B</b>	0.018	0.0094	mg/Kg	☼	12/14/16 16:00	12/15/16 12:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.8</b>		0.2	0.2	SU			12/14/16 15:42	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-G01**

**Lab Sample ID: 500-121261-7**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

**Method: 8260B - VOC**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0017	mg/L			12/16/16 17:37	1
Benzene	<0.00050		0.00050	0.00015	mg/L			12/16/16 17:37	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/L			12/16/16 17:37	1
Bromoform	<0.0010		0.0010	0.00048	mg/L			12/16/16 17:37	1
Bromomethane	<0.0020		0.0020	0.00080	mg/L			12/16/16 17:37	1
Carbon disulfide	<0.0020		0.0020	0.00045	mg/L			12/16/16 17:37	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/L			12/16/16 17:37	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/L			12/16/16 17:37	1
Chloroethane	<0.0010		0.0010	0.00051	mg/L			12/16/16 17:37	1
Chloroform	<0.0010		0.0010	0.00037	mg/L			12/16/16 17:37	1
Chloromethane	<0.0010		0.0010	0.00032	mg/L			12/16/16 17:37	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/L			12/16/16 17:37	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/L			12/16/16 17:37	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/L			12/16/16 17:37	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/L			12/16/16 17:37	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/L			12/16/16 17:37	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/L			12/16/16 17:37	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/L			12/16/16 17:37	1
1,3-Dichloropropene, Total	<0.0010		0.0010	0.00042	mg/L			12/16/16 17:37	1
Ethylbenzene	<0.00050		0.00050	0.00018	mg/L			12/16/16 17:37	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/L			12/16/16 17:37	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/L			12/16/16 17:37	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0021	mg/L			12/16/16 17:37	1
methyl isobutyl ketone	<0.0050		0.0050	0.0022	mg/L			12/16/16 17:37	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/L			12/16/16 17:37	1
Styrene	<0.0010		0.0010	0.00039	mg/L			12/16/16 17:37	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/L			12/16/16 17:37	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/L			12/16/16 17:37	1
Toluene	<0.00050		0.00050	0.00015	mg/L			12/16/16 17:37	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/L			12/16/16 17:37	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/L			12/16/16 17:37	1
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/L			12/16/16 17:37	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/L			12/16/16 17:37	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/L			12/16/16 17:37	1
Vinyl acetate	<0.0020		0.0020	0.00091	mg/L			12/16/16 17:37	1
Vinyl chloride	<0.00050		0.00050	0.00020	mg/L			12/16/16 17:37	1
<b>Xylenes, Total</b>	<b>0.00067</b>	<b>J</b>	0.0010	0.00022	mg/L			12/16/16 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		71 - 120		12/16/16 17:37	1
Dibromofluoromethane	91		70 - 120		12/16/16 17:37	1
1,2-Dichloroethane-d4 (Surr)	104		71 - 127		12/16/16 17:37	1
Toluene-d8 (Surr)	91		75 - 120		12/16/16 17:37	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.0016		0.0016	0.00019	mg/L		12/12/16 21:45	12/16/16 05:20	1
1,2-Dichlorobenzene	<0.0016		0.0016	0.00020	mg/L		12/12/16 21:45	12/16/16 05:20	1
1,3-Dichlorobenzene	<0.0016		0.0016	0.00017	mg/L		12/12/16 21:45	12/16/16 05:20	1
1,4-Dichlorobenzene	<0.0016		0.0016	0.00017	mg/L		12/12/16 21:45	12/16/16 05:20	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-G01**

**Lab Sample ID: 500-121261-7**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis[1-chloropropane]	<0.0016		0.0016	0.00031	mg/L		12/12/16 21:45	12/16/16 05:20	1
2,4,5-Trichlorophenol	<0.0081		0.0081	0.0021	mg/L		12/12/16 21:45	12/16/16 05:20	1
2,4,6-Trichlorophenol	<0.0041		0.0041	0.00058	mg/L		12/12/16 21:45	12/16/16 05:20	1
2,4-Dichlorophenol	<0.0081		0.0081	0.0021	mg/L		12/12/16 21:45	12/16/16 05:20	1
2,4-Dimethylphenol	<0.0081	*	0.0081	0.0015	mg/L		12/12/16 21:45	12/16/16 05:20	1
2,4-Dinitrophenol	<0.016		0.016	0.0070	mg/L		12/12/16 21:45	12/16/16 05:20	1
2,4-Dinitrotoluene	<0.00081		0.00081	0.00020	mg/L		12/12/16 21:45	12/16/16 05:20	1
2,6-Dinitrotoluene	<0.00081		0.00081	0.000060	mg/L		12/12/16 21:45	12/16/16 05:20	1
2-Chloronaphthalene	<0.0016		0.0016	0.00019	mg/L		12/12/16 21:45	12/16/16 05:20	1
2-Chlorophenol	<0.0041		0.0041	0.00046	mg/L		12/12/16 21:45	12/16/16 05:20	1
2-Methylnaphthalene	<0.0016		0.0016	0.000053	mg/L		12/12/16 21:45	12/16/16 05:20	1
2-Methylphenol	<0.0016		0.0016	0.00025	mg/L		12/12/16 21:45	12/16/16 05:20	1
2-Nitroaniline	<0.0041		0.0041	0.0010	mg/L		12/12/16 21:45	12/16/16 05:20	1
2-Nitrophenol	<0.0081		0.0081	0.0020	mg/L		12/12/16 21:45	12/16/16 05:20	1
3 & 4 Methylphenol	<0.0016		0.0016	0.00037	mg/L		12/12/16 21:45	12/16/16 05:20	1
3,3'-Dichlorobenzidine	<0.0041	*	0.0041	0.0014	mg/L		12/12/16 21:45	12/16/16 05:20	1
3-Nitroaniline	<0.0081		0.0081	0.0015	mg/L		12/12/16 21:45	12/16/16 05:20	1
4,6-Dinitro-2-methylphenol	<0.016		0.016	0.0048	mg/L		12/12/16 21:45	12/16/16 05:20	1
4-Bromophenyl phenyl ether	<0.0041		0.0041	0.00044	mg/L		12/12/16 21:45	12/16/16 05:20	1
4-Chloro-3-methylphenol	<0.0081		0.0081	0.0019	mg/L		12/12/16 21:45	12/16/16 05:20	1
4-Chloroaniline	<0.0081		0.0081	0.0016	mg/L		12/12/16 21:45	12/16/16 05:20	1
4-Chlorophenyl phenyl ether	<0.0041		0.0041	0.00052	mg/L		12/12/16 21:45	12/16/16 05:20	1
4-Nitroaniline	<0.0081		0.0081	0.0014	mg/L		12/12/16 21:45	12/16/16 05:20	1
4-Nitrophenol	<0.016		0.016	0.0060	mg/L		12/12/16 21:45	12/16/16 05:20	1
Acenaphthene	<0.00081		0.00081	0.00025	mg/L		12/12/16 21:45	12/16/16 05:20	1
Acenaphthylene	<0.00081		0.00081	0.00022	mg/L		12/12/16 21:45	12/16/16 05:20	1
Anthracene	<0.00081		0.00081	0.00027	mg/L		12/12/16 21:45	12/16/16 05:20	1
Benzo[a]anthracene	<0.00013		0.00013	0.000046	mg/L		12/12/16 21:45	12/16/16 05:20	1
Benzo[a]pyrene	<0.00016		0.00016	0.000081	mg/L		12/12/16 21:45	12/16/16 05:20	1
Benzo[b]fluoranthene	<0.00016		0.00016	0.000066	mg/L		12/12/16 21:45	12/16/16 05:20	1
Benzo[g,h,i]perylene	<0.00081		0.00081	0.00031	mg/L		12/12/16 21:45	12/16/16 05:20	1
Benzo[k]fluoranthene	<0.00016		0.00016	0.000052	mg/L		12/12/16 21:45	12/16/16 05:20	1
Bis(2-chloroethoxy)methane	<0.0016		0.0016	0.00023	mg/L		12/12/16 21:45	12/16/16 05:20	1
Bis(2-chloroethyl)ether	<0.0016		0.0016	0.00024	mg/L		12/12/16 21:45	12/16/16 05:20	1
Bis(2-ethylhexyl) phthalate	<0.0081		0.0081	0.0014	mg/L		12/12/16 21:45	12/16/16 05:20	1
Butyl benzyl phthalate	<0.0016		0.0016	0.00039	mg/L		12/12/16 21:45	12/16/16 05:20	1
Carbazole	<0.0041		0.0041	0.00029	mg/L		12/12/16 21:45	12/16/16 05:20	1
Chrysene	<0.00016		0.00016	0.000055	mg/L		12/12/16 21:45	12/16/16 05:20	1
Dibenz(a,h)anthracene	<0.00024		0.00024	0.000041	mg/L		12/12/16 21:45	12/16/16 05:20	1
Dibenzofuran	<0.0016		0.0016	0.00021	mg/L		12/12/16 21:45	12/16/16 05:20	1
<b>Diethyl phthalate</b>	<b>0.00048</b>	<b>J</b>	0.0016	0.00029	mg/L		12/12/16 21:45	12/16/16 05:20	1
Dimethyl phthalate	<0.0016		0.0016	0.00026	mg/L		12/12/16 21:45	12/16/16 05:20	1
Di-n-butyl phthalate	<0.0041		0.0041	0.00059	mg/L		12/12/16 21:45	12/16/16 05:20	1
Di-n-octyl phthalate	<0.0081		0.0081	0.00086	mg/L		12/12/16 21:45	12/16/16 05:20	1
Fluoranthene	<0.00081		0.00081	0.00037	mg/L		12/12/16 21:45	12/16/16 05:20	1
Fluorene	<0.00081		0.00081	0.00020	mg/L		12/12/16 21:45	12/16/16 05:20	1
Hexachlorobenzene	<0.00041		0.00041	0.000065	mg/L		12/12/16 21:45	12/16/16 05:20	1
Hexachlorobutadiene	<0.0041		0.0041	0.00042	mg/L		12/12/16 21:45	12/16/16 05:20	1
Hexachlorocyclopentadiene	<0.016		0.016	0.0052	mg/L		12/12/16 21:45	12/16/16 05:20	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-G01**

**Lab Sample ID: 500-121261-7**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<0.0041		0.0041	0.00049	mg/L		12/12/16 21:45	12/16/16 05:20	1
Indeno[1,2,3-cd]pyrene	<0.00016		0.00016	0.000061	mg/L		12/12/16 21:45	12/16/16 05:20	1
Isophorone	<0.0016		0.0016	0.00031	mg/L		12/12/16 21:45	12/16/16 05:20	1
Naphthalene	<0.00081		0.00081	0.00025	mg/L		12/12/16 21:45	12/16/16 05:20	1
Nitrobenzene	<0.00081		0.00081	0.00037	mg/L		12/12/16 21:45	12/16/16 05:20	1
N-Nitrosodi-n-propylamine	<0.00041		0.00041	0.00013	mg/L		12/12/16 21:45	12/16/16 05:20	1
N-Nitrosodiphenylamine	<0.00081	*	0.00081	0.00030	mg/L		12/12/16 21:45	12/16/16 05:20	1
Pentachlorophenol	<0.016		0.016	0.0032	mg/L		12/12/16 21:45	12/16/16 05:20	1
Phenanthrene	<0.00081		0.00081	0.00025	mg/L		12/12/16 21:45	12/16/16 05:20	1
Phenol	<0.0041		0.0041	0.00055	mg/L		12/12/16 21:45	12/16/16 05:20	1
Pyrene	<0.00081		0.00081	0.00035	mg/L		12/12/16 21:45	12/16/16 05:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol	102		30 - 150				12/12/16 21:45	12/16/16 05:20	1
2-Fluorobiphenyl	62		30 - 123				12/12/16 21:45	12/16/16 05:20	1
2-Fluorophenol	48		30 - 110				12/12/16 21:45	12/16/16 05:20	1
Nitrobenzene-d5	62		33 - 139				12/12/16 21:45	12/16/16 05:20	1
Phenol-d5	34		20 - 100				12/12/16 21:45	12/16/16 05:20	1
Terphenyl-d14	106		42 - 150				12/12/16 21:45	12/16/16 05:20	1

## Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.0074</b>		0.0010	0.00044	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Barium</b>	<b>0.18</b>		0.0025	0.00084	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Beryllium</b>	<b>0.00072</b>	J ^	0.0010	0.00024	mg/L		12/09/16 14:56	12/15/16 19:40	1
<b>Boron</b>	<b>0.49</b>		0.050	0.025	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Cadmium</b>	<b>0.0012</b>		0.00050	0.00019	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Calcium</b>	<b>85</b>		0.20	0.11	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Chromium</b>	<b>0.017</b>		0.0050	0.00061	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Cobalt</b>	<b>0.0044</b>		0.0010	0.00019	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Copper</b>	<b>0.029</b>		0.0020	0.00096	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Iron</b>	<b>15</b>	B	0.10	0.026	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Lead</b>	<b>0.51</b>		0.00050	0.00014	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Magnesium</b>	<b>11</b>		0.20	0.083	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Manganese</b>	<b>0.39</b>		0.0025	0.00099	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Nickel</b>	<b>0.013</b>		0.0020	0.00053	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Potassium</b>	<b>9.6</b>		0.50	0.19	mg/L		12/09/16 14:56	12/12/16 17:30	1
Selenium	<0.0025		0.0025	0.00083	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Silver</b>	<b>0.00011</b>	J	0.00050	0.000080	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Sodium</b>	<b>21</b>		0.20	0.088	mg/L		12/09/16 14:56	12/12/16 17:30	1
Thallium	<0.0020		0.0020	0.00059	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Vanadium</b>	<b>0.015</b>		0.0050	0.0022	mg/L		12/09/16 14:56	12/12/16 17:30	1
<b>Zinc</b>	<b>0.31</b>	B	0.020	0.0046	mg/L		12/09/16 14:56	12/12/16 17:30	1

## Method: 7470A - Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.00012</b>	J	0.00020	0.00011	mg/L		12/12/16 14:00	12/13/16 13:39	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-G01D**

**Lab Sample ID: 500-121261-8**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

**Method: 8260B - VOC**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0017	mg/L			12/20/16 01:27	1
Benzene	<0.00050		0.00050	0.00015	mg/L			12/20/16 01:27	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/L			12/20/16 01:27	1
Bromoform	<0.0010		0.0010	0.00048	mg/L			12/20/16 01:27	1
Bromomethane	<0.0020		0.0020	0.00080	mg/L			12/20/16 01:27	1
Carbon disulfide	<0.0020		0.0020	0.00045	mg/L			12/20/16 01:27	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/L			12/20/16 01:27	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/L			12/20/16 01:27	1
Chloroethane	<0.0010		0.0010	0.00051	mg/L			12/20/16 01:27	1
Chloroform	<0.0010		0.0010	0.00037	mg/L			12/20/16 01:27	1
Chloromethane	<0.0010		0.0010	0.00032	mg/L			12/20/16 01:27	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/L			12/20/16 01:27	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/L			12/20/16 01:27	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/L			12/20/16 01:27	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/L			12/20/16 01:27	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/L			12/20/16 01:27	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/L			12/20/16 01:27	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/L			12/20/16 01:27	1
1,3-Dichloropropane, Total	<0.0010		0.0010	0.00042	mg/L			12/20/16 01:27	1
Ethylbenzene	<0.00050		0.00050	0.00018	mg/L			12/20/16 01:27	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/L			12/20/16 01:27	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/L			12/20/16 01:27	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0021	mg/L			12/20/16 01:27	1
methyl isobutyl ketone	<0.0050		0.0050	0.0022	mg/L			12/20/16 01:27	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/L			12/20/16 01:27	1
Styrene	<0.0010		0.0010	0.00039	mg/L			12/20/16 01:27	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/L			12/20/16 01:27	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/L			12/20/16 01:27	1
Toluene	<0.00050		0.00050	0.00015	mg/L			12/20/16 01:27	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/L			12/20/16 01:27	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/L			12/20/16 01:27	1
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/L			12/20/16 01:27	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/L			12/20/16 01:27	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/L			12/20/16 01:27	1
Vinyl acetate	<0.0020		0.0020	0.00091	mg/L			12/20/16 01:27	1
Vinyl chloride	<0.00050		0.00050	0.00020	mg/L			12/20/16 01:27	1
Xylenes, Total	<0.0010		0.0010	0.00022	mg/L			12/20/16 01:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		71 - 120		12/20/16 01:27	1
Dibromofluoromethane	90		70 - 120		12/20/16 01:27	1
1,2-Dichloroethane-d4 (Surr)	100		71 - 127		12/20/16 01:27	1
Toluene-d8 (Surr)	93		75 - 120		12/20/16 01:27	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.0016		0.0016	0.00019	mg/L		12/12/16 21:45	12/16/16 05:45	1
1,2-Dichlorobenzene	<0.0016		0.0016	0.00020	mg/L		12/12/16 21:45	12/16/16 05:45	1
1,3-Dichlorobenzene	<0.0016		0.0016	0.00017	mg/L		12/12/16 21:45	12/16/16 05:45	1
1,4-Dichlorobenzene	<0.0016		0.0016	0.00017	mg/L		12/12/16 21:45	12/16/16 05:45	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-G01D**

**Lab Sample ID: 500-121261-8**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis[1-chloropropane]	<0.0016		0.0016	0.00030	mg/L		12/12/16 21:45	12/16/16 05:45	1
2,4,5-Trichlorophenol	<0.0080		0.0080	0.0021	mg/L		12/12/16 21:45	12/16/16 05:45	1
2,4,6-Trichlorophenol	<0.0040		0.0040	0.00057	mg/L		12/12/16 21:45	12/16/16 05:45	1
2,4-Dichlorophenol	<0.0080		0.0080	0.0021	mg/L		12/12/16 21:45	12/16/16 05:45	1
2,4-Dimethylphenol	<0.0080	*	0.0080	0.0014	mg/L		12/12/16 21:45	12/16/16 05:45	1
2,4-Dinitrophenol	<0.016		0.016	0.0069	mg/L		12/12/16 21:45	12/16/16 05:45	1
2,4-Dinitrotoluene	<0.00080		0.00080	0.00020	mg/L		12/12/16 21:45	12/16/16 05:45	1
2,6-Dinitrotoluene	<0.00080		0.00080	0.000059	mg/L		12/12/16 21:45	12/16/16 05:45	1
2-Chloronaphthalene	<0.0016		0.0016	0.00019	mg/L		12/12/16 21:45	12/16/16 05:45	1
2-Chlorophenol	<0.0040		0.0040	0.00045	mg/L		12/12/16 21:45	12/16/16 05:45	1
2-Methylnaphthalene	<0.0016		0.0016	0.000052	mg/L		12/12/16 21:45	12/16/16 05:45	1
2-Methylphenol	<0.0016		0.0016	0.00024	mg/L		12/12/16 21:45	12/16/16 05:45	1
2-Nitroaniline	<0.0040		0.0040	0.0010	mg/L		12/12/16 21:45	12/16/16 05:45	1
2-Nitrophenol	<0.0080		0.0080	0.0020	mg/L		12/12/16 21:45	12/16/16 05:45	1
3 & 4 Methylphenol	<0.0016		0.0016	0.00036	mg/L		12/12/16 21:45	12/16/16 05:45	1
3,3'-Dichlorobenzidine	<0.0040	*	0.0040	0.0014	mg/L		12/12/16 21:45	12/16/16 05:45	1
3-Nitroaniline	<0.0080		0.0080	0.0014	mg/L		12/12/16 21:45	12/16/16 05:45	1
4,6-Dinitro-2-methylphenol	<0.016		0.016	0.0047	mg/L		12/12/16 21:45	12/16/16 05:45	1
4-Bromophenyl phenyl ether	<0.0040		0.0040	0.00043	mg/L		12/12/16 21:45	12/16/16 05:45	1
4-Chloro-3-methylphenol	<0.0080		0.0080	0.0018	mg/L		12/12/16 21:45	12/16/16 05:45	1
4-Chloroaniline	<0.0080		0.0080	0.0016	mg/L		12/12/16 21:45	12/16/16 05:45	1
4-Chlorophenyl phenyl ether	<0.0040		0.0040	0.00051	mg/L		12/12/16 21:45	12/16/16 05:45	1
4-Nitroaniline	<0.0080		0.0080	0.0013	mg/L		12/12/16 21:45	12/16/16 05:45	1
4-Nitrophenol	<0.016		0.016	0.0060	mg/L		12/12/16 21:45	12/16/16 05:45	1
Acenaphthene	<0.00080		0.00080	0.00025	mg/L		12/12/16 21:45	12/16/16 05:45	1
Acenaphthylene	<0.00080		0.00080	0.00021	mg/L		12/12/16 21:45	12/16/16 05:45	1
Anthracene	<0.00080		0.00080	0.00027	mg/L		12/12/16 21:45	12/16/16 05:45	1
Benzo[a]anthracene	<0.00013		0.00013	0.000045	mg/L		12/12/16 21:45	12/16/16 05:45	1
Benzo[a]pyrene	<0.00016		0.00016	0.000079	mg/L		12/12/16 21:45	12/16/16 05:45	1
Benzo[b]fluoranthene	<0.00016		0.00016	0.000065	mg/L		12/12/16 21:45	12/16/16 05:45	1
Benzo[g,h,i]perylene	<0.00080		0.00080	0.00030	mg/L		12/12/16 21:45	12/16/16 05:45	1
Benzo[k]fluoranthene	<0.00016		0.00016	0.000051	mg/L		12/12/16 21:45	12/16/16 05:45	1
Bis(2-chloroethoxy)methane	<0.0016		0.0016	0.00023	mg/L		12/12/16 21:45	12/16/16 05:45	1
Bis(2-chloroethyl)ether	<0.0016		0.0016	0.00023	mg/L		12/12/16 21:45	12/16/16 05:45	1
Bis(2-ethylhexyl) phthalate	<0.0080		0.0080	0.0014	mg/L		12/12/16 21:45	12/16/16 05:45	1
Butyl benzyl phthalate	<0.0016		0.0016	0.00038	mg/L		12/12/16 21:45	12/16/16 05:45	1
Carbazole	<0.0040		0.0040	0.00028	mg/L		12/12/16 21:45	12/16/16 05:45	1
Chrysene	<0.00016		0.00016	0.000055	mg/L		12/12/16 21:45	12/16/16 05:45	1
Dibenz(a,h)anthracene	<0.00024		0.00024	0.000041	mg/L		12/12/16 21:45	12/16/16 05:45	1
Dibenzofuran	<0.0016		0.0016	0.00021	mg/L		12/12/16 21:45	12/16/16 05:45	1
<b>Diethyl phthalate</b>	<b>0.00041</b>	<b>J</b>	0.0016	0.00029	mg/L		12/12/16 21:45	12/16/16 05:45	1
Dimethyl phthalate	<0.0016		0.0016	0.00025	mg/L		12/12/16 21:45	12/16/16 05:45	1
Di-n-butyl phthalate	<0.0040		0.0040	0.00059	mg/L		12/12/16 21:45	12/16/16 05:45	1
Di-n-octyl phthalate	<0.0080		0.0080	0.00084	mg/L		12/12/16 21:45	12/16/16 05:45	1
Fluoranthene	<0.00080		0.00080	0.00036	mg/L		12/12/16 21:45	12/16/16 05:45	1
Fluorene	<0.00080		0.00080	0.00020	mg/L		12/12/16 21:45	12/16/16 05:45	1
Hexachlorobenzene	<0.00040		0.00040	0.000064	mg/L		12/12/16 21:45	12/16/16 05:45	1
Hexachlorobutadiene	<0.0040		0.0040	0.00041	mg/L		12/12/16 21:45	12/16/16 05:45	1
Hexachlorocyclopentadiene	<0.016		0.016	0.0051	mg/L		12/12/16 21:45	12/16/16 05:45	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-G01D**

**Lab Sample ID: 500-121261-8**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<0.0040		0.0040	0.00048	mg/L		12/12/16 21:45	12/16/16 05:45	1
Indeno[1,2,3-cd]pyrene	<0.00016		0.00016	0.000060	mg/L		12/12/16 21:45	12/16/16 05:45	1
Isophorone	<0.0016		0.0016	0.00030	mg/L		12/12/16 21:45	12/16/16 05:45	1
Naphthalene	<0.00080		0.00080	0.00025	mg/L		12/12/16 21:45	12/16/16 05:45	1
Nitrobenzene	<0.00080		0.00080	0.00036	mg/L		12/12/16 21:45	12/16/16 05:45	1
N-Nitrosodi-n-propylamine	<0.00040		0.00040	0.00012	mg/L		12/12/16 21:45	12/16/16 05:45	1
N-Nitrosodiphenylamine	<0.00080	*	0.00080	0.00030	mg/L		12/12/16 21:45	12/16/16 05:45	1
Pentachlorophenol	<0.016		0.016	0.0032	mg/L		12/12/16 21:45	12/16/16 05:45	1
<b>Phenanthrene</b>	<b>0.00032</b>	<b>J</b>	0.00080	0.00024	mg/L		12/12/16 21:45	12/16/16 05:45	1
Phenol	<0.0040		0.0040	0.00054	mg/L		12/12/16 21:45	12/16/16 05:45	1
Pyrene	<0.00080		0.00080	0.00034	mg/L		12/12/16 21:45	12/16/16 05:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	116		30 - 150	12/12/16 21:45	12/16/16 05:45	1
2-Fluorobiphenyl	78		30 - 123	12/12/16 21:45	12/16/16 05:45	1
2-Fluorophenol	55		30 - 110	12/12/16 21:45	12/16/16 05:45	1
Nitrobenzene-d5	73		33 - 139	12/12/16 21:45	12/16/16 05:45	1
Phenol-d5	37		20 - 100	12/12/16 21:45	12/16/16 05:45	1
Terphenyl-d14	116		42 - 150	12/12/16 21:45	12/16/16 05:45	1

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.0068</b>		0.0010	0.00044	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Barium</b>	<b>0.17</b>		0.0025	0.00084	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Beryllium</b>	<b>0.00071</b>	<b>J ^</b>	0.0010	0.00024	mg/L		12/09/16 14:56	12/15/16 19:44	1
<b>Boron</b>	<b>0.46</b>		0.050	0.025	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Cadmium</b>	<b>0.0011</b>		0.00050	0.00019	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Calcium</b>	<b>83</b>		0.20	0.11	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Chromium</b>	<b>0.012</b>		0.0050	0.00061	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Cobalt</b>	<b>0.0039</b>		0.0010	0.00019	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Copper</b>	<b>0.028</b>		0.0020	0.00096	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Iron</b>	<b>14</b>	<b>B</b>	0.10	0.026	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Lead</b>	<b>0.48</b>		0.00050	0.00014	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Magnesium</b>	<b>11</b>		0.20	0.083	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Manganese</b>	<b>0.35</b>		0.0025	0.00099	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Nickel</b>	<b>0.012</b>		0.0020	0.00053	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Potassium</b>	<b>9.1</b>		0.50	0.19	mg/L		12/09/16 14:56	12/12/16 17:33	1
Selenium	<0.0025		0.0025	0.00083	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Silver</b>	<b>0.00010</b>	<b>J</b>	0.00050	0.000080	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Sodium</b>	<b>20</b>		0.20	0.088	mg/L		12/09/16 14:56	12/12/16 17:33	1
Thallium	<0.0020		0.0020	0.00059	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Vanadium</b>	<b>0.015</b>		0.0050	0.0022	mg/L		12/09/16 14:56	12/12/16 17:33	1
<b>Zinc</b>	<b>0.27</b>	<b>B</b>	0.020	0.0046	mg/L		12/09/16 14:56	12/12/16 17:33	1

**Method: 7470A - Mercury**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		12/12/16 14:00	12/13/16 13:41	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-00-TB03**

**Lab Sample ID: 500-121261-9**

**Date Collected: 12/08/16 00:00**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

**Method: 8260B - VOC**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0017	mg/L			12/16/16 18:29	1
Benzene	<0.00050		0.00050	0.00015	mg/L			12/16/16 18:29	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/L			12/16/16 18:29	1
Bromoform	<0.0010		0.0010	0.00048	mg/L			12/16/16 18:29	1
Bromomethane	<0.0020		0.0020	0.00080	mg/L			12/16/16 18:29	1
Carbon disulfide	<0.0020		0.0020	0.00045	mg/L			12/16/16 18:29	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/L			12/16/16 18:29	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/L			12/16/16 18:29	1
Chloroethane	<0.0010		0.0010	0.00051	mg/L			12/16/16 18:29	1
Chloroform	<0.0010		0.0010	0.00037	mg/L			12/16/16 18:29	1
Chloromethane	<0.0010		0.0010	0.00032	mg/L			12/16/16 18:29	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/L			12/16/16 18:29	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/L			12/16/16 18:29	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/L			12/16/16 18:29	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/L			12/16/16 18:29	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/L			12/16/16 18:29	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/L			12/16/16 18:29	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/L			12/16/16 18:29	1
1,3-Dichloropropene, Total	<0.0010		0.0010	0.00042	mg/L			12/16/16 18:29	1
Ethylbenzene	<0.00050		0.00050	0.00018	mg/L			12/16/16 18:29	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/L			12/16/16 18:29	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/L			12/16/16 18:29	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0021	mg/L			12/16/16 18:29	1
methyl isobutyl ketone	<0.0050		0.0050	0.0022	mg/L			12/16/16 18:29	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/L			12/16/16 18:29	1
Styrene	<0.0010		0.0010	0.00039	mg/L			12/16/16 18:29	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/L			12/16/16 18:29	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/L			12/16/16 18:29	1
Toluene	<0.00050		0.00050	0.00015	mg/L			12/16/16 18:29	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/L			12/16/16 18:29	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/L			12/16/16 18:29	1
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/L			12/16/16 18:29	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/L			12/16/16 18:29	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/L			12/16/16 18:29	1
Vinyl acetate	<0.0020		0.0020	0.00091	mg/L			12/16/16 18:29	1
Vinyl chloride	<0.00050		0.00050	0.00020	mg/L			12/16/16 18:29	1
Xylenes, Total	<0.0010		0.0010	0.00022	mg/L			12/16/16 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		71 - 120		12/16/16 18:29	1
Dibromofluoromethane	92		70 - 120		12/16/16 18:29	1
1,2-Dichloroethane-d4 (Surr)	105		71 - 127		12/16/16 18:29	1
Toluene-d8 (Surr)	91		75 - 120		12/16/16 18:29	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (0-6)**

**Lab Sample ID: 500-121261-10**

**Date Collected: 12/08/16 10:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 88.9**

**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	☼	12/09/16 17:53	12/11/16 15:17	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/09/16 17:53	12/11/16 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 120	12/09/16 17:53	12/11/16 15:17	1
Dibromofluoromethane	100		75 - 120	12/09/16 17:53	12/11/16 15:17	1
1,2-Dichloroethane-d4 (Surr)	110		69 - 134	12/09/16 17:53	12/11/16 15:17	1
Toluene-d8 (Surr)	103		75 - 123	12/09/16 17:53	12/11/16 15:17	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 14:49	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (0-6)**

**Lab Sample ID: 500-121261-10**

**Date Collected: 12/08/16 10:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 88.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Naphthalene</b>	<b>0.014</b>	<b>J</b>	0.036	0.0056	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>2-Methylnaphthalene</b>	<b>0.014</b>	<b>J</b>	0.073	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Acenaphthene</b>	<b>0.0085</b>	<b>J</b>	0.036	0.0065	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Phenanthrene</b>	<b>0.028</b>	<b>J</b>	0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Fluoranthene</b>	<b>0.035</b>	<b>J</b>	0.036	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Pyrene</b>	<b>0.032</b>	<b>J</b>	0.036	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Benzo[a]anthracene</b>	<b>0.021</b>	<b>J</b>	0.036	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (0-6)**

**Lab Sample ID: 500-121261-10**

Date Collected: 12/08/16 10:45

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 88.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.026</b>	<b>J</b>	0.036	0.0099	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Benzo[b]fluoranthene</b>	<b>0.048</b>		0.036	0.0078	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Benzo[k]fluoranthene</b>	<b>0.022</b>	<b>J</b>	0.036	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Benzo[a]pyrene</b>	<b>0.034</b>	<b>J</b>	0.036	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.027</b>	<b>J</b>	0.036	0.0094	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
<b>Benzo[g,h,i]perylene</b>	<b>0.019</b>	<b>J</b>	0.036	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 14:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	95		40 - 130	12/19/16 16:12	12/20/16 14:49	1
Phenol-d5	95		36 - 123	12/19/16 16:12	12/20/16 14:49	1
Nitrobenzene-d5	82		33 - 124	12/19/16 16:12	12/20/16 14:49	1
2-Fluorobiphenyl	83		42 - 115	12/19/16 16:12	12/20/16 14:49	1
2,4,6-Tribromophenol	59		25 - 130	12/19/16 16:12	12/20/16 14:49	1
Terphenyl-d14	97		25 - 150	12/19/16 16:12	12/20/16 14:49	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.40</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Arsenic</b>	<b>6.7</b>		0.55	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Barium</b>	<b>54</b>		0.55	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Beryllium</b>	<b>0.59</b>		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Boron</b>	<b>1.5</b>	<b>J</b>	2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Cadmium</b>	<b>0.39</b>		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Calcium</b>	<b>21000</b>	<b>B</b>	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Chromium</b>	<b>35</b>	<b>B</b>	0.55	0.095	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Cobalt</b>	<b>7.2</b>		0.28	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Copper</b>	<b>27</b>		0.55	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Iron</b>	<b>21000</b>		11	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Lead</b>	<b>22</b>		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Magnesium</b>	<b>8200</b>		5.5	2.2	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Manganese</b>	<b>340</b>		0.55	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Nickel</b>	<b>61</b>		0.55	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Potassium</b>	<b>780</b>		28	4.5	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Sodium</b>	<b>73</b>		55	7.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Thallium</b>	<b>0.68</b>		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Vanadium</b>	<b>23</b>		0.28	0.081	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1
<b>Zinc</b>	<b>39</b>		1.1	0.35	mg/Kg	☼	12/14/16 15:50	12/16/16 21:48	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.76</b>		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:04	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:04	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (0-6)**

**Lab Sample ID: 500-121261-10**

**Date Collected: 12/08/16 10:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 88.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0045</b>	<b>J</b>	0.0050	0.0020	mg/L		12/15/16 08:57	12/16/16 00:04	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:04	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:04	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 08:57	12/16/16 00:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/15/16 08:57	12/16/16 00:04	1
<b>Manganese</b>	<b>2.3</b>		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:04	1
<b>Nickel</b>	<b>0.24</b>		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:04	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/16/16 00:04	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:04	1
<b>Zinc</b>	<b>0.044</b>	<b>J</b>	0.50	0.020	mg/L		12/15/16 08:57	12/16/16 00:04	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.11</b>		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 05:40	1
<b>Nickel</b>	<b>0.027</b>		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 05:40	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		12/15/16 08:57	12/15/16 18:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 18:34	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		12/15/16 13:00	12/16/16 10:57	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.035</b>	<b>B</b>	0.017	0.0091	mg/Kg	☼	12/14/16 16:00	12/15/16 12:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU			12/14/16 15:45	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)**

**Lab Sample ID: 500-121261-11**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**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	0.0073	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/09/16 17:53	12/11/16 15:42	1
Dibromofluoromethane	101		75 - 120	12/09/16 17:53	12/11/16 15:42	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/09/16 17:53	12/11/16 15:42	1
Toluene-d8 (Surr)	103		75 - 123	12/09/16 17:53	12/11/16 15:42	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	☼	12/19/16 16:12	12/20/16 15:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)**

**Lab Sample ID: 500-121261-11**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**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	☼	12/19/16 16:12	12/20/16 15:14	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>Naphthalene</b>	<b>0.0077</b>	<b>J</b>	0.039	0.0060	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>2-Methylnaphthalene</b>	<b>0.0084</b>	<b>J</b>	0.079	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>Phenanthrene</b>	<b>0.016</b>	<b>J</b>	0.039	0.0055	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>Fluoranthene</b>	<b>0.016</b>	<b>J</b>	0.039	0.0073	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>Pyrene</b>	<b>0.014</b>	<b>J</b>	0.039	0.0078	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>Benzo[a]anthracene</b>	<b>0.0089</b>	<b>J</b>	0.039	0.0053	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)**

**Lab Sample ID: 500-121261-11**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 83.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.012</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>Benzo[b]fluoranthene</b>	<b>0.021</b>	<b>J</b>	0.039	0.0085	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
<b>Benzo[a]pyrene</b>	<b>0.0091</b>	<b>J</b>	0.039	0.0076	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/19/16 16:12	12/20/16 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		40 - 130	12/19/16 16:12	12/20/16 15:14	1
Phenol-d5	61		36 - 123	12/19/16 16:12	12/20/16 15:14	1
Nitrobenzene-d5	70		33 - 124	12/19/16 16:12	12/20/16 15:14	1
2-Fluorobiphenyl	67		42 - 115	12/19/16 16:12	12/20/16 15:14	1
2,4,6-Tribromophenol	45		25 - 130	12/19/16 16:12	12/20/16 15:14	1
Terphenyl-d14	84		25 - 150	12/19/16 16:12	12/20/16 15:14	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.35</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Arsenic</b>	<b>4.5</b>		0.56	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Barium</b>	<b>64</b>		0.56	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Beryllium</b>	<b>0.55</b>		0.23	0.049	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Boron</b>	<b>1.7</b>	<b>J</b>	2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Cadmium</b>	<b>0.27</b>		0.11	0.033	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Calcium</b>	<b>23000</b>	<b>B</b>	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Chromium</b>	<b>15</b>	<b>B</b>	0.56	0.097	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Cobalt</b>	<b>5.4</b>		0.28	0.064	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Copper</b>	<b>14</b>		0.56	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Iron</b>	<b>15000</b>		11	4.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Lead</b>	<b>20</b>		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Magnesium</b>	<b>11000</b>		5.6	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Manganese</b>	<b>230</b>		0.56	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Nickel</b>	<b>14</b>		0.56	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Potassium</b>	<b>740</b>		28	4.6	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
Silver	<0.28		0.28	0.066	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Sodium</b>	<b>140</b>		56	7.4	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Thallium</b>	<b>0.61</b>		0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Vanadium</b>	<b>25</b>		0.28	0.082	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1
<b>Zinc</b>	<b>34</b>		1.1	0.36	mg/Kg	☼	12/14/16 15:50	12/16/16 21:55	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.77</b>		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:17	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:17	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)**

**Lab Sample ID: 500-121261-11**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 83.0**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0074</b>		0.0050	0.0020	mg/L		12/15/16 08:57	12/16/16 00:17	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:17	1
<b>Cobalt</b>	<b>0.020</b>	<b>J</b>	0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:17	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 08:57	12/16/16 00:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/19/16 08:53	12/19/16 22:19	1
<b>Manganese</b>	<b>4.3</b>		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:17	1
<b>Nickel</b>	<b>0.063</b>		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:17	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/16/16 00:17	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:17	1
<b>Zinc</b>	<b>0.38</b>	<b>J</b>	0.50	0.020	mg/L		12/15/16 08:57	12/16/16 00:17	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		12/14/16 14:09	12/16/16 06:02	1
<b>Manganese</b>	<b>0.28</b>		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 06:02	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 08:57	12/15/16 18:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 18:39	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/15/16 13:00	12/16/16 10:58	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.038</b>	<b>B</b>	0.018	0.0094	mg/Kg	☼	12/14/16 16:00	12/15/16 12:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>9.1</b>		0.2	0.2	SU			12/14/16 15:48	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)D**

**Lab Sample ID: 500-121261-12**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 82.2**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Vinyl acetate	<0.0042		0.0042	0.0014	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 120	12/09/16 17:53	12/11/16 16:07	1
Dibromofluoromethane	100		75 - 120	12/09/16 17:53	12/11/16 16:07	1
1,2-Dichloroethane-d4 (Surr)	109		69 - 134	12/09/16 17:53	12/11/16 16:07	1
Toluene-d8 (Surr)	102		75 - 123	12/09/16 17:53	12/11/16 16:07	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	☼	12/19/16 16:12	12/20/16 15:39	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)D**

**Lab Sample ID: 500-121261-12**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**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	☼	12/19/16 16:12	12/20/16 15:39	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,4-Dinitrophenol	<0.77	*	0.77	0.68	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)D**

**Lab Sample ID: 500-121261-12**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**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	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
<b>Benzo[b]fluoranthene</b>	<b>0.013</b>	<b>J</b>	0.038	0.0083	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		40 - 130	12/19/16 16:12	12/20/16 15:39	1
Phenol-d5	50		36 - 123	12/19/16 16:12	12/20/16 15:39	1
Nitrobenzene-d5	52		33 - 124	12/19/16 16:12	12/20/16 15:39	1
2-Fluorobiphenyl	55		42 - 115	12/19/16 16:12	12/20/16 15:39	1
2,4,6-Tribromophenol	44		25 - 130	12/19/16 16:12	12/20/16 15:39	1
Terphenyl-d14	77		25 - 150	12/19/16 16:12	12/20/16 15:39	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.44</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Arsenic</b>	<b>3.0</b>		0.58	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Barium</b>	<b>50</b>		0.58	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Beryllium</b>	<b>0.55</b>		0.23	0.050	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Boron</b>	<b>2.0</b>	<b>J</b>	2.9	0.40	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Cadmium</b>	<b>0.25</b>		0.12	0.033	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Calcium</b>	<b>30000</b>	<b>B</b>	12	3.7	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Chromium</b>	<b>17</b>	<b>B</b>	0.58	0.099	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Cobalt</b>	<b>4.6</b>		0.29	0.065	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Copper</b>	<b>13</b>		0.58	0.13	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Iron</b>	<b>12000</b>		12	4.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Lead</b>	<b>20</b>		0.29	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Magnesium</b>	<b>12000</b>		5.8	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Manganese</b>	<b>250</b>		0.58	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Nickel</b>	<b>14</b>		0.58	0.16	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Potassium</b>	<b>450</b>		29	4.7	mg/Kg	☼	12/14/16 15:50	12/18/16 20:39	1
Selenium	<0.58		0.58	0.29	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
Silver	<0.29		0.29	0.067	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Sodium</b>	<b>140</b>		58	7.6	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Thallium</b>	<b>0.52</b>	<b>J</b>	0.58	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Vanadium</b>	<b>24</b>		0.29	0.084	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1
<b>Zinc</b>	<b>33</b>		1.2	0.36	mg/Kg	☼	12/14/16 15:50	12/16/16 22:17	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.79</b>		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:21	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:21	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)D**

**Lab Sample ID: 500-121261-12**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 82.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0040</b>	<b>J</b>	0.0050	0.0020	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
Cobalt	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
Iron	<0.40		0.40	0.20	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
<b>Manganese</b>	<b>3.4</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
<b>Nickel</b>	<b>0.038</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
Silver	<0.025		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:21	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/15/16 08:57	12/16/16 00:21	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.28</b>		0.025	0.010	mg/L	-	12/14/16 14:09	12/16/16 06:09	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 08:57	12/15/16 18:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/15/16 08:57	12/15/16 18:53	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 10:59	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.036</b>	<b>B</b>	0.019	0.0098	mg/Kg	☼	12/14/16 16:00	12/15/16 12:30	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.9</b>		0.2	0.2	SU	-		12/14/16 15:51	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B01 (0-8)**

**Lab Sample ID: 500-121261-13**

**Date Collected: 12/08/16 11:20**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.1**

**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	☼	12/08/16 11:20	12/13/16 13:47	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,1,2,2-Tetrachloroethane	<0.0020 *		0.0020	0.00063	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1
Xylenes, Total	<0.0040		0.0040	0.00063	mg/Kg	☼	12/08/16 11:20	12/13/16 13:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	* X	70 - 120	12/08/16 11:20	12/13/16 13:47	1
Dibromofluoromethane	91		75 - 120	12/08/16 11:20	12/13/16 13:47	1
1,2-Dichloroethane-d4 (Surr)	88		69 - 134	12/08/16 11:20	12/13/16 13:47	1
Toluene-d8 (Surr)	124	X	75 - 123	12/08/16 11:20	12/13/16 13:47	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 19:00	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B01 (0-8)**

**Lab Sample ID: 500-121261-13**

**Date Collected: 12/08/16 11:20**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.1**

**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	☼	12/19/16 16:12	12/20/16 19:00	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Naphthalene</b>	<b>0.041</b>		0.036	0.0056	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>2-Methylnaphthalene</b>	<b>0.032 J</b>		0.073	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,4-Dinitrophenol	<0.73 *		0.73	0.64	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Acenaphthene</b>	<b>0.018 J</b>		0.036	0.0065	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Fluorene</b>	<b>0.018 J</b>		0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Phenanthrene</b>	<b>0.24</b>		0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Anthracene</b>	<b>0.053</b>		0.036	0.0061	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Fluoranthene</b>	<b>0.37</b>		0.036	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Pyrene</b>	<b>0.33</b>		0.036	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Benzo[a]anthracene</b>	<b>0.20</b>		0.036	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1

TestAmerica Chicago



# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B01 (0-8)**

**Lab Sample ID: 500-121261-13**

Date Collected: 12/08/16 11:20

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 86.1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.22</b>		0.036	0.0099	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Benzo[b]fluoranthene</b>	<b>0.37</b>		0.036	0.0079	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Benzo[k]fluoranthene</b>	<b>0.14</b>		0.036	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Benzo[a]pyrene</b>	<b>0.25</b>		0.036	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.084</b>		0.036	0.0094	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Dibenz(a,h)anthracene</b>	<b>0.029</b>	J	0.036	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
<b>Benzo[g,h,i]perylene</b>	<b>0.074</b>		0.036	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	77		40 - 130	12/19/16 16:12	12/20/16 19:00	1
Phenol-d5	77		36 - 123	12/19/16 16:12	12/20/16 19:00	1
Nitrobenzene-d5	70		33 - 124	12/19/16 16:12	12/20/16 19:00	1
2-Fluorobiphenyl	68		42 - 115	12/19/16 16:12	12/20/16 19:00	1
2,4,6-Tribromophenol	49		25 - 130	12/19/16 16:12	12/20/16 19:00	1
Terphenyl-d14	85		25 - 150	12/19/16 16:12	12/20/16 19:00	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	0.0065	mg/Kg	☼	12/13/16 16:25	12/14/16 15:03	1
PCB-1221	<0.018		0.018	0.0081	mg/Kg	☼	12/13/16 16:25	12/14/16 15:03	1
PCB-1232	<0.018		0.018	0.0080	mg/Kg	☼	12/13/16 16:25	12/14/16 15:03	1
PCB-1242	<0.018		0.018	0.0061	mg/Kg	☼	12/13/16 16:25	12/14/16 15:03	1
PCB-1248	<0.018		0.018	0.0073	mg/Kg	☼	12/13/16 16:25	12/14/16 15:03	1
PCB-1254	<0.018		0.018	0.0040	mg/Kg	☼	12/13/16 16:25	12/14/16 15:03	1
PCB-1260	<0.018		0.018	0.0090	mg/Kg	☼	12/13/16 16:25	12/14/16 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		41 - 124	12/13/16 16:25	12/14/16 15:03	1
DCB Decachlorobiphenyl	97		47 - 127	12/13/16 16:25	12/14/16 15:03	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>2.8</b>	J	5.5	1.1	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Arsenic</b>	<b>14</b>		2.8	1.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Barium</b>	<b>31</b>		2.8	0.51	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Beryllium</b>	<b>0.27</b>	J	1.1	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Boron</b>	<b>7.1</b>	J	14	1.9	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Cadmium</b>	<b>0.42</b>	J	0.55	0.16	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Calcium</b>	<b>4500</b>	B	55	18	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Chromium</b>	<b>94</b>	B	2.8	0.48	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Cobalt</b>	<b>10</b>		1.4	0.31	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Copper</b>	<b>66</b>		2.8	0.60	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Iron</b>	<b>95000</b>		55	21	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Lead</b>	<b>110</b>		1.4	0.69	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Magnesium</b>	<b>1100</b>		28	11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
<b>Manganese</b>	<b>850</b>		2.8	0.55	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B01 (0-8)**

**Lab Sample ID: 500-121261-13**

Date Collected: 12/08/16 11:20

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 86.1

### Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	310		2.8	0.75	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
Potassium	370		140	23	mg/Kg	☼	12/14/16 15:50	12/18/16 20:43	5
Selenium	2.2	J	2.8	1.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
Silver	<1.4		1.4	0.32	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
Sodium	85	J	280	37	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
Thallium	2.8		2.8	1.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
Vanadium	34		1.4	0.40	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5
Zinc	84		5.5	1.8	mg/Kg	☼	12/14/16 15:50	12/16/16 22:24	5

### 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		12/15/16 08:57	12/16/16 00:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:26	1
Boron	0.070	J	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:26	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/15/16 08:57	12/16/16 00:26	1
Chromium	0.014	J	0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:26	1
Cobalt	0.086		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:26	1
Iron	86		0.40	0.20	mg/L		12/15/16 08:57	12/16/16 00:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/19/16 08:53	12/19/16 22:24	1
Manganese	9.3		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:26	1
Nickel	1.2		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:26	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/16/16 00:26	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:26	1
Zinc	0.39	J	0.50	0.020	mg/L		12/15/16 08:57	12/16/16 00:26	1

### Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	11		0.40	0.20	mg/L		12/14/16 14:09	12/16/16 06:16	1
Manganese	0.059		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 06:16	1
Nickel	0.010	J	0.025	0.010	mg/L		12/14/16 14:09	12/16/16 06:16	1

### Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/15/16 08:57	12/15/16 18:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 18:57	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		12/15/16 13:00	12/16/16 11:01	1

### Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	B	0.019	0.010	mg/Kg	☼	12/14/16 16:00	12/15/16 12:37	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			12/14/16 15:54	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B02 (0-8)**

**Lab Sample ID: 500-121261-14**

**Date Collected: 12/08/16 11:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 85.1**

**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	☼	12/09/16 17:53	12/11/16 16:57	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Chloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Methylene Chloride	<0.0052		0.0052	0.0021	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0016	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	12/09/16 17:53	12/11/16 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 120	12/09/16 17:53	12/11/16 16:57	1
Dibromofluoromethane	99		75 - 120	12/09/16 17:53	12/11/16 16:57	1
1,2-Dichloroethane-d4 (Surr)	111		69 - 134	12/09/16 17:53	12/11/16 16:57	1
Toluene-d8 (Surr)	106		75 - 123	12/09/16 17:53	12/11/16 16:57	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B02 (0-8)**

**Lab Sample ID: 500-121261-14**

**Date Collected: 12/08/16 11:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**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	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Naphthalene</b>	<b>0.026</b>	<b>J</b>	0.037	0.0057	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>2-Methylnaphthalene</b>	<b>0.022</b>	<b>J</b>	0.075	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,4-Dinitrophenol	<0.75	*	0.75	0.66	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Acenaphthylene</b>	<b>0.022</b>	<b>J</b>	0.037	0.0049	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Acenaphthene</b>	<b>0.011</b>	<b>J</b>	0.037	0.0067	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Fluorene</b>	<b>0.0086</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Phenanthrene</b>	<b>0.24</b>		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Anthracene</b>	<b>0.060</b>		0.037	0.0062	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Fluoranthene</b>	<b>1.1</b>		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Pyrene</b>	<b>2.0</b>		0.037	0.0074	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Benzo[a]anthracene</b>	<b>1.0</b>		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B02 (0-8)**

**Lab Sample ID: 500-121261-14**

Date Collected: 12/08/16 11:50

Matrix: Solid

Date Received: 12/09/16 10:00

Percent Solids: 85.1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chrysene</b>	<b>0.96</b>		0.037	0.010	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Benzo[b]fluoranthene</b>	<b>1.3</b>		0.037	0.0080	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Benzo[k]fluoranthene</b>	<b>0.50</b>		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Benzo[a]pyrene</b>	<b>1.3</b>		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.27</b>		0.037	0.0096	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Dibenz(a,h)anthracene</b>	<b>0.11</b>		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
<b>Benzo[g,h,i]perylene</b>	<b>0.28</b>		0.037	0.012	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/19/16 16:12	12/20/16 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		40 - 130	12/19/16 16:12	12/20/16 19:25	1
Phenol-d5	84		36 - 123	12/19/16 16:12	12/20/16 19:25	1
Nitrobenzene-d5	85		33 - 124	12/19/16 16:12	12/20/16 19:25	1
2-Fluorobiphenyl	83		42 - 115	12/19/16 16:12	12/20/16 19:25	1
2,4,6-Tribromophenol	63		25 - 130	12/19/16 16:12	12/20/16 19:25	1
Terphenyl-d14	110		25 - 150	12/19/16 16:12	12/20/16 19:25	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>1.3</b>	<b>J</b>	5.5	1.1	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Arsenic</b>	<b>7.7</b>		2.8	1.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Barium</b>	<b>62</b>		2.8	0.51	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Beryllium</b>	<b>0.58</b>	<b>J</b>	1.1	0.24	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Boron</b>	<b>11</b>	<b>J</b>	14	1.9	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Cadmium</b>	<b>0.59</b>		0.55	0.16	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Calcium</b>	<b>13000</b>	<b>B</b>	55	18	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Chromium</b>	<b>27</b>	<b>B</b>	2.8	0.48	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Cobalt</b>	<b>5.8</b>		1.4	0.31	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Copper</b>	<b>29</b>		2.8	0.60	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Iron</b>	<b>37000</b>		55	21	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Lead</b>	<b>82</b>		1.4	0.69	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Magnesium</b>	<b>2200</b>		28	11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Manganese</b>	<b>660</b>		2.8	0.55	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Nickel</b>	<b>49</b>		2.8	0.75	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Potassium</b>	<b>600</b>		140	23	mg/Kg	☼	12/14/16 15:50	12/18/16 20:48	5
Selenium	<2.8		2.8	1.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
Silver	<1.4		1.4	0.32	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Sodium</b>	<b>140</b>	<b>J</b>	280	36	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Thallium</b>	<b>1.5</b>	<b>J</b>	2.8	1.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Vanadium</b>	<b>23</b>		1.4	0.40	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5
<b>Zinc</b>	<b>160</b>		5.5	1.7	mg/Kg	☼	12/14/16 15:50	12/16/16 22:31	5

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.40</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/16/16 00:31	1
<b>Boron</b>	<b>0.077</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:31	1

TestAmerica Chicago

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B02 (0-8)**

**Lab Sample ID: 500-121261-14**

**Date Collected: 12/08/16 11:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 85.1**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cadmium</b>	<b>0.0053</b>		0.0050	0.0020	mg/L		12/15/16 08:57	12/16/16 00:31	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:31	1
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:31	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 08:57	12/16/16 00:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/19/16 08:53	12/19/16 22:50	1
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:31	1
<b>Nickel</b>	<b>0.022</b>	<b>J</b>	0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:31	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/16/16 00:31	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/16/16 00:31	1
<b>Zinc</b>	<b>0.49</b>	<b>J</b>	0.50	0.020	mg/L		12/15/16 08:57	12/16/16 00:31	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		12/14/16 14:09	12/16/16 06:23	1
<b>Manganese</b>	<b>0.17</b>		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 06:23	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		12/15/16 08:57	12/15/16 19:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 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		12/15/16 13:00	12/16/16 11:02	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.43</b>	<b>B</b>	0.020	0.010	mg/Kg	☼	12/14/16 16:00	12/15/16 12:39	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU			12/14/16 15:57	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-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: 500-121261-1

**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
<b>Phenanthrene</b>	<b>0.014</b>	<b>J</b>	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
<b>Fluoranthene</b>	<b>0.033</b>	<b>J</b>	0.038	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
<b>Pyrene</b>	<b>0.028</b>	<b>J</b>	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
<b>Benzo[a]anthracene</b>	<b>0.014</b>	<b>J</b>	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: 500-121261-1

**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
<b>Chrysene</b>	<b>0.016</b>	<b>J</b>	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
<b>Benzo[b]fluoranthene</b>	<b>0.031</b>	<b>J</b>	0.038	0.0083	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
<b>Benzo[k]fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.038	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 16:04	1
<b>Benzo[a]pyrene</b>	<b>0.019</b>	<b>J</b>	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
<b>Antimony</b>	<b>0.25</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Arsenic</b>	<b>4.7</b>		0.56	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Barium</b>	<b>70</b>		0.56	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Beryllium</b>	<b>0.48</b>		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Boron</b>	<b>2.2</b>	<b>J</b>	2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Cadmium</b>	<b>0.21</b>		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Calcium</b>	<b>30000</b>	<b>B</b>	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Chromium</b>	<b>13</b>	<b>B</b>	0.56	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Cobalt</b>	<b>5.3</b>		0.28	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Copper</b>	<b>11</b>		0.56	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Iron</b>	<b>13000</b>		11	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Lead</b>	<b>6.9</b>		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Magnesium</b>	<b>17000</b>		5.6	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Manganese</b>	<b>290</b>		0.56	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Nickel</b>	<b>16</b>		0.56	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Potassium</b>	<b>480</b>		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
<b>Sodium</b>	<b>120</b>		56	7.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Thallium</b>	<b>0.62</b>		0.56	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Vanadium</b>	<b>23</b>		0.28	0.081	mg/Kg	☼	12/14/16 15:50	12/16/16 22:38	1
<b>Zinc</b>	<b>27</b>		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
<b>Barium</b>	<b>0.98</b>		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: 500-121261-1

**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
<b>Cadmium</b>	<b>0.0029</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.81</b>		0.025	0.010	mg/L	-	12/15/16 08:57	12/16/16 00:36	1
<b>Nickel</b>	<b>0.021</b>	<b>J</b>	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
<b>Zinc</b>	<b>0.057</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.17</b>		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
<b>Mercury</b>	<b>0.013</b>	<b>J B</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
<b>pH</b>	<b>8.6</b>		0.2	0.2	SU	-		12/14/16 16:00	1

# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-11-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: 500-121261-1

**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
<b>Naphthalene</b>	<b>0.014</b>	<b>J</b>	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
<b>2-Methylnaphthalene</b>	<b>0.020</b>	<b>J</b>	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
<b>Acenaphthylene</b>	<b>0.011</b>	<b>J</b>	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
<b>Acenaphthene</b>	<b>0.031</b>	<b>J</b>	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
<b>Fluorene</b>	<b>0.032</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.40</b>		0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
<b>Anthracene</b>	<b>0.092</b>		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
<b>Fluoranthene</b>	<b>0.79</b>		0.036	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
<b>Pyrene</b>	<b>0.76</b>		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
<b>Benzo[a]anthracene</b>	<b>0.40</b>		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: 500-121261-1

**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
<b>Chrysene</b>	<b>0.38</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.67</b>		0.036	0.0079	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
<b>Benzo[k]fluoranthene</b>	<b>0.27</b>		0.036	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
<b>Benzo[a]pyrene</b>	<b>0.51</b>		0.036	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.16</b>		0.036	0.0094	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
<b>Dibenz(a,h)anthracene</b>	<b>0.054</b>		0.036	0.0070	mg/Kg	☼	12/19/16 16:12	12/20/16 19:51	1
<b>Benzo[g,h,i]perylene</b>	<b>0.15</b>		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
<b>Antimony</b>	<b>0.47</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Arsenic</b>	<b>4.3</b>		0.55	0.25	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Barium</b>	<b>81</b>		0.55	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Beryllium</b>	<b>0.56</b>		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Boron</b>	<b>5.6</b>		2.8	0.38	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Cadmium</b>	<b>0.44</b>		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Calcium</b>	<b>19000</b>	<b>B</b>	11	3.5	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Chromium</b>	<b>15</b>	<b>B</b>	0.55	0.095	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Cobalt</b>	<b>5.0</b>		0.28	0.062	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Copper</b>	<b>19</b>		0.55	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Iron</b>	<b>15000</b>		11	4.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Lead</b>	<b>73</b>		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Magnesium</b>	<b>4300</b>		5.5	2.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Manganese</b>	<b>440</b>		0.55	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Nickel</b>	<b>13</b>		0.55	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Potassium</b>	<b>580</b>		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
<b>Sodium</b>	<b>280</b>		55	7.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Thallium</b>	<b>0.80</b>		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Vanadium</b>	<b>21</b>		0.28	0.080	mg/Kg	☼	12/14/16 15:50	12/16/16 22:44	1
<b>Zinc</b>	<b>85</b>		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
<b>Barium</b>	<b>0.74</b>		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
<b>Boron</b>	<b>0.064</b>	<b>J</b>	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: 500-121261-1

**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
<b>Cadmium</b>	<b>0.0032</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.46</b>		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
<b>Zinc</b>	<b>0.069</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.33</b>		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
<b>Mercury</b>	<b>0.12</b>	<b>B</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
<b>pH</b>	<b>8.5</b>		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: 500-121261-1

**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: 500-121261-1

**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
<b>Naphthalene</b>	<b>0.013</b>	<b>J</b>	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
<b>2-Methylnaphthalene</b>	<b>0.016</b>	<b>J</b>	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
<b>Acenaphthylene</b>	<b>0.010</b>	<b>J</b>	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
<b>Acenaphthene</b>	<b>0.025</b>	<b>J</b>	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
<b>Fluorene</b>	<b>0.023</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.35</b>		0.036	0.0051	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
<b>Anthracene</b>	<b>0.074</b>		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
<b>Fluoranthene</b>	<b>0.68</b>		0.036	0.0068	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
<b>Pyrene</b>	<b>0.70</b>		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
<b>Benzo[a]anthracene</b>	<b>0.35</b>		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: 500-121261-1

**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
<b>Chrysene</b>	<b>0.34</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.59</b>		0.036	0.0079	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
<b>Benzo[k]fluoranthene</b>	<b>0.78</b>		0.036	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
<b>Benzo[a]pyrene</b>	<b>0.42</b>		0.036	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.14</b>		0.036	0.0095	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
<b>Dibenz(a,h)anthracene</b>	<b>0.046</b>		0.036	0.0071	mg/Kg	☼	12/19/16 16:12	12/20/16 20:16	1
<b>Benzo[g,h,i]perylene</b>	<b>0.12</b>		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
<b>Antimony</b>	<b>0.33</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Arsenic</b>	<b>4.1</b>		0.56	0.26	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Barium</b>	<b>87</b>		0.56	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Beryllium</b>	<b>0.54</b>		0.22	0.049	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Boron</b>	<b>5.1</b>		2.8	0.39	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Cadmium</b>	<b>0.43</b>		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Calcium</b>	<b>21000</b>	<b>B</b>	11	3.6	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Chromium</b>	<b>15</b>	<b>B</b>	0.56	0.096	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Cobalt</b>	<b>5.0</b>		0.28	0.063	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Copper</b>	<b>17</b>		0.56	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Iron</b>	<b>13000</b>		11	4.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Lead</b>	<b>65</b>		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Magnesium</b>	<b>4000</b>		5.6	2.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Manganese</b>	<b>460</b>		0.56	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Nickel</b>	<b>13</b>		0.56	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Potassium</b>	<b>600</b>		28	4.6	mg/Kg	☼	12/14/16 15:50	12/18/16 21:08	1
<b>Selenium</b>	<b>0.30</b>	<b>J</b>	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
<b>Sodium</b>	<b>270</b>		56	7.4	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Thallium</b>	<b>0.84</b>		0.56	0.28	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Vanadium</b>	<b>20</b>		0.28	0.082	mg/Kg	☼	12/14/16 15:50	12/16/16 22:51	1
<b>Zinc</b>	<b>76</b>		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
<b>Barium</b>	<b>0.74</b>		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
<b>Boron</b>	<b>0.060</b>	<b>J</b>	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: 500-121261-1

**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
<b>Cadmium</b>	<b>0.0029</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.61</b>		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
<b>Zinc</b>	<b>0.094</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.37</b>		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
<b>Mercury</b>	<b>0.091</b>	<b>B</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
<b>pH</b>	<b>8.5</b>		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: 500-121261-1

**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-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
1,1,2,2-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: 500-121261-1

**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
<b>Naphthalene</b>	<b>0.0088</b>	<b>J</b>	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
<b>2-Methylnaphthalene</b>	<b>0.013</b>	<b>J</b>	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
<b>Acenaphthylene</b>	<b>0.012</b>	<b>J</b>	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
<b>Acenaphthene</b>	<b>0.016</b>	<b>J</b>	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
<b>Fluorene</b>	<b>0.013</b>	<b>J</b>	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
<b>Phenanthrene</b>	<b>0.25</b>		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
<b>Anthracene</b>	<b>0.045</b>		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
<b>Fluoranthene</b>	<b>0.49</b>		0.037	0.0069	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
<b>Pyrene</b>	<b>0.57</b>		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
<b>Benzo[a]anthracene</b>	<b>0.22</b>		0.037	0.0050	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1

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# Client Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-11-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
<b>Chrysene</b>	<b>0.25</b>		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
<b>Benzo[b]fluoranthene</b>	<b>0.44</b>		0.037	0.0081	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
<b>Benzo[k]fluoranthene</b>	<b>0.16</b>		0.037	0.011	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
<b>Benzo[a]pyrene</b>	<b>0.29</b>		0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.11</b>		0.037	0.0097	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
<b>Dibenz(a,h)anthracene</b>	<b>0.034</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	12/19/16 16:12	12/20/16 20:41	1
<b>Benzo[g,h,i]perylene</b>	<b>0.095</b>		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
<b>Antimony</b>	<b>0.37</b>	<b>J</b>	1.1	0.23	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Arsenic</b>	<b>4.8</b>		0.55	0.25	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Barium</b>	<b>85</b>		0.55	0.10	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Beryllium</b>	<b>0.47</b>		0.22	0.048	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Boron</b>	<b>4.1</b>		2.8	0.38	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Cadmium</b>	<b>0.44</b>		0.11	0.032	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Calcium</b>	<b>83000</b>	<b>B</b>	110	35	mg/Kg	☼	12/14/16 15:50	12/18/16 21:18	10
<b>Chromium</b>	<b>17</b>	<b>B</b>	0.55	0.095	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Cobalt</b>	<b>5.2</b>		0.28	0.062	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Copper</b>	<b>20</b>		0.55	0.12	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Iron</b>	<b>14000</b>		11	4.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Lead</b>	<b>130</b>		0.28	0.14	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Magnesium</b>	<b>4500</b>		5.5	2.2	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Manganese</b>	<b>580</b>		0.55	0.11	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Nickel</b>	<b>14</b>		0.55	0.15	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Potassium</b>	<b>650</b>		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
<b>Sodium</b>	<b>180</b>		55	7.3	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Thallium</b>	<b>0.93</b>		0.55	0.27	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Vanadium</b>	<b>18</b>		0.28	0.080	mg/Kg	☼	12/14/16 15:50	12/16/16 22:58	1
<b>Zinc</b>	<b>120</b>		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
<b>Barium</b>	<b>0.86</b>		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
<b>Boron</b>	<b>0.061</b>	<b>J</b>	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: 500-121261-1

**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
<b>Cadmium</b>	<b>0.0037</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.97</b>		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
<b>Zinc</b>	<b>0.25</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.29</b>		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
<b>Mercury</b>	<b>0.13</b>	<b>B</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
<b>pH</b>	<b>8.4</b>		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: 500-121261-1

**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: 500-121261-1

**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
<b>Phenanthrene</b>	<b>0.053</b>		0.037	0.0052	mg/Kg	☼	12/19/16 16:12	12/20/16 16:30	1
<b>Anthracene</b>	<b>0.011</b>	<b>J</b>	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: 500-121261-1

**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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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: 500-121261-1

**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
<b>Barium</b>	<b>0.78</b>		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
<b>Boron</b>	<b>0.074</b>	<b>J</b>	0.50	0.050	mg/L		12/15/16 08:57	12/16/16 00:55	1
<b>Cadmium</b>	<b>0.0021</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.90</b>		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
<b>Zinc</b>	<b>0.048</b>	<b>J</b>	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
<b>Manganese</b>	<b>0.38</b>		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
<b>Mercury</b>	<b>0.065</b>	<b>B</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
<b>pH</b>	<b>8.4</b>		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: 500-121261-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### 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
*	RPD of the LCS and LCSD exceeds the 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.
^	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)

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## GC/MS VOA

### Prep Batch: 364544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	5035	
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	5035	
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	5035	
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	5035	
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	5035	
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	5035	
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	5035	
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	5035	
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	5035	
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	5035	
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	5035	
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	5035	
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	5035	
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	5035	
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	5035	
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	5035	
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	5035	

### Analysis Batch: 364545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	8260B	364544
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	8260B	364544
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	8260B	364544
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	8260B	364544
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	8260B	364544
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	8260B	364544
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	8260B	364544
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	8260B	364544
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	8260B	364544
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	8260B	364544
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	8260B	364544
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	8260B	364544
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	8260B	364544
MB 500-364545/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-364545/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-364545/25	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 364610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	8260B	364544
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	8260B	364544
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	8260B	364544
MB 500-364610/8	Method Blank	Total/NA	Solid	8260B	
LCS 500-364610/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-364610/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 364836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	8260B	364544
MB 500-364836/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-364836/4	Lab Control Sample	Total/NA	Solid	8260B	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Analysis Batch: 365402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total/NA	Water	8260B	
500-121261-9	1314V3-00-TB03	Total/NA	Water	8260B	
MB 500-365402/6	Method Blank	Total/NA	Water	8260B	
LCS 500-365402/4	Lab Control Sample	Total/NA	Water	8260B	

## Analysis Batch: 365839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-8	1314V3-02-G01D	Total/NA	Water	8260B	
MB 500-365839/7	Method Blank	Total/NA	Water	8260B	
LCS 500-365839/5	Lab Control Sample	Total/NA	Water	8260B	

## GC/MS Semi VOA

### Prep Batch: 364764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total/NA	Water	3510C	
500-121261-8	1314V3-02-G01D	Total/NA	Water	3510C	
MB 500-364764/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-364764/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-364764/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 364917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-364764/1-A	Method Blank	Total/NA	Water	8270D	364764
LCS 500-364764/2-A	Lab Control Sample	Total/NA	Water	8270D	364764
LCSD 500-364764/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	364764

### Analysis Batch: 365383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total/NA	Water	8270D	364764
500-121261-8	1314V3-02-G01D	Total/NA	Water	8270D	364764

### Prep Batch: 365830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	3541	
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	3541	
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	3541	
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	3541	
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	3541	
500-121261-6 - DL	1314V3-02-B01 (5-10)	Total/NA	Solid	3541	
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	3541	
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	3541	
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	3541	
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	3541	
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	3541	
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	3541	
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	3541	
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	3541	
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	3541	
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	3541	
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	3541	
MB 500-365830/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-365830/2-A	Lab Control Sample	Total/NA	Solid	3541	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 365830 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-19 MS	1314V3-11-B01 (0-1)	Total/NA	Solid	3541	
500-121261-19 MSD	1314V3-11-B01 (0-1)	Total/NA	Solid	3541	

### Analysis Batch: 365886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-365830/1-A	Method Blank	Total/NA	Solid	8270D	365830
LCS 500-365830/2-A	Lab Control Sample	Total/NA	Solid	8270D	365830

### Analysis Batch: 365896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	8270D	365830
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	8270D	365830
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	8270D	365830
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	8270D	365830
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	8270D	365830
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	8270D	365830
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	8270D	365830
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	8270D	365830
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	8270D	365830
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	8270D	365830
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	8270D	365830
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	8270D	365830
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	8270D	365830
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	8270D	365830
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	8270D	365830
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	8270D	365830
500-121261-19 MS	1314V3-11-B01 (0-1)	Total/NA	Solid	8270D	365830
500-121261-19 MSD	1314V3-11-B01 (0-1)	Total/NA	Solid	8270D	365830

### Analysis Batch: 366210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-6 - DL	1314V3-02-B01 (5-10)	Total/NA	Solid	8270D	365830

## GC Semi VOA

### Prep Batch: 364935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	3541	
MB 500-364935/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-364935/3-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 365035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	8082A	364935
MB 500-364935/1-A	Method Blank	Total/NA	Solid	8082A	364935
LCS 500-364935/3-A	Lab Control Sample	Total/NA	Solid	8082A	364935

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals

### Prep Batch: 364441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total Recoverable	Water	3005A	
500-121261-8	1314V3-02-G01D	Total Recoverable	Water	3005A	
MB 500-364441/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-364441/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Prep Batch: 364700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total/NA	Water	7470A	
500-121261-8	1314V3-02-G01D	Total/NA	Water	7470A	
MB 500-364700/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-364700/13-A	Lab Control Sample	Total/NA	Water	7470A	

### Analysis Batch: 364838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total Recoverable	Water	6020A	364441
500-121261-8	1314V3-02-G01D	Total Recoverable	Water	6020A	364441
MB 500-364441/1-A	Method Blank	Total Recoverable	Water	6020A	364441
LCS 500-364441/2-A	Lab Control Sample	Total Recoverable	Water	6020A	364441

### Leach Batch: 364903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	SPLP East	Solid	1312	
500-121261-2	1314V3-01-B36 (8-16)	SPLP East	Solid	1312	
500-121261-3	1314V3-01-B36 (16-24)	SPLP East	Solid	1312	
500-121261-4	1314V3-01-B36 (24-28)	SPLP East	Solid	1312	
500-121261-6	1314V3-02-B01 (5-10)	SPLP East	Solid	1312	
500-121261-10	1314V3-02-B02 (0-6)	SPLP East	Solid	1312	
500-121261-11	1314V3-02-B02 (6-12)	SPLP East	Solid	1312	
500-121261-12	1314V3-02-B02 (6-12)D	SPLP East	Solid	1312	
500-121261-13	1314V3-06-B01 (0-8)	SPLP East	Solid	1312	
500-121261-14	1314V3-06-B02 (0-8)	SPLP East	Solid	1312	
500-121261-15	1314V3-06-B03 (0-4)	SPLP East	Solid	1312	
500-121261-16	1314V3-11-B03 (0-1)	SPLP East	Solid	1312	
500-121261-17	1314V3-11-B03 (0-1)D	SPLP East	Solid	1312	
500-121261-18	1314V3-11-B02 (0-1)	SPLP East	Solid	1312	
500-121261-19	1314V3-11-B01 (0-1)	SPLP East	Solid	1312	
LB 500-364903/1-B	Method Blank	SPLP East	Solid	1312	
500-121261-19 MS	1314V3-11-B01 (0-1)	SPLP East	Solid	1312	
500-121261-19 DU	1314V3-11-B01 (0-1)	SPLP East	Solid	1312	

### Analysis Batch: 364926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total/NA	Water	7470A	364700
500-121261-8	1314V3-02-G01D	Total/NA	Water	7470A	364700
MB 500-364700/12-A	Method Blank	Total/NA	Water	7470A	364700
LCS 500-364700/13-A	Lab Control Sample	Total/NA	Water	7470A	364700

### Leach Batch: 365091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	TCLP	Solid	1311	
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	1311	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals (Continued)

### Leach Batch: 365091 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-3	1314V3-01-B36 (16-24)	TCLP	Solid	1311	
500-121261-4	1314V3-01-B36 (24-28)	TCLP	Solid	1311	
500-121261-5	1314V3-02-B01 (0-5)	TCLP	Solid	1311	
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	1311	
500-121261-10	1314V3-02-B02 (0-6)	TCLP	Solid	1311	
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	1311	
500-121261-12	1314V3-02-B02 (6-12)D	TCLP	Solid	1311	
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	1311	
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	1311	
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	1311	
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	1311	
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	1311	
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	1311	
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	1311	
LB 500-365091/1-B	Method Blank	TCLP	Solid	1311	
LB 500-365091/1-C	Method Blank	TCLP	Solid	1311	
500-121261-1 MS	1314V3-01-B36 (0-8)	TCLP	Solid	1311	
500-121261-19 MS	1314V3-11-B01 (0-1)	TCLP	Solid	1311	
500-121261-1 DU	1314V3-01-B36 (0-8)	TCLP	Solid	1311	
500-121261-19 DU	1314V3-11-B01 (0-1)	TCLP	Solid	1311	

### Prep Batch: 365114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	SPLP East	Solid	3010A	364903
500-121261-2	1314V3-01-B36 (8-16)	SPLP East	Solid	3010A	364903
500-121261-3	1314V3-01-B36 (16-24)	SPLP East	Solid	3010A	364903
500-121261-4	1314V3-01-B36 (24-28)	SPLP East	Solid	3010A	364903
500-121261-6	1314V3-02-B01 (5-10)	SPLP East	Solid	3010A	364903
500-121261-10	1314V3-02-B02 (0-6)	SPLP East	Solid	3010A	364903
500-121261-11	1314V3-02-B02 (6-12)	SPLP East	Solid	3010A	364903
500-121261-12	1314V3-02-B02 (6-12)D	SPLP East	Solid	3010A	364903
500-121261-13	1314V3-06-B01 (0-8)	SPLP East	Solid	3010A	364903
500-121261-14	1314V3-06-B02 (0-8)	SPLP East	Solid	3010A	364903
500-121261-15	1314V3-06-B03 (0-4)	SPLP East	Solid	3010A	364903
500-121261-16	1314V3-11-B03 (0-1)	SPLP East	Solid	3010A	364903
500-121261-17	1314V3-11-B03 (0-1)D	SPLP East	Solid	3010A	364903
500-121261-18	1314V3-11-B02 (0-1)	SPLP East	Solid	3010A	364903
500-121261-19	1314V3-11-B01 (0-1)	SPLP East	Solid	3010A	364903
LB 500-364903/1-B	Method Blank	SPLP East	Solid	3010A	364903
LCS 500-365114/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-121261-19 MS	1314V3-11-B01 (0-1)	SPLP East	Solid	3010A	364903
500-121261-19 DU	1314V3-11-B01 (0-1)	SPLP East	Solid	3010A	364903

### Prep Batch: 365139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	7471B	
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	7471B	
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	7471B	
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	7471B	
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	7471B	

TestAmerica Chicago



# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals (Continued)

### Prep Batch: 365139 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	7471B	
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	7471B	
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	7471B	
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	7471B	
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	7471B	
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	7471B	
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	7471B	
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	7471B	
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	7471B	
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	7471B	
MB 500-365139/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-365139/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-121261-1 MS	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	
500-121261-1 MSD	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	
500-121261-1 DU	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	

### Prep Batch: 365146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	3050B	
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	3050B	
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	3050B	
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	3050B	
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	3050B	
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	3050B	
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	3050B	
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	3050B	
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	3050B	
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	3050B	
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	3050B	
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	3050B	
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	3050B	
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	3050B	
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	3050B	
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	3050B	
MB 500-365146/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-365146/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-121261-19 MS	1314V3-11-B01 (0-1)	Total/NA	Solid	3050B	
500-121261-19 MSD	1314V3-11-B01 (0-1)	Total/NA	Solid	3050B	
500-121261-19 DU	1314V3-11-B01 (0-1)	Total/NA	Solid	3050B	

### Prep Batch: 365242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	TCLP	Solid	3010A	365091
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	3010A	365091
500-121261-3	1314V3-01-B36 (16-24)	TCLP	Solid	3010A	365091
500-121261-4	1314V3-01-B36 (24-28)	TCLP	Solid	3010A	365091
500-121261-5	1314V3-02-B01 (0-5)	TCLP	Solid	3010A	365091
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	3010A	365091
500-121261-10	1314V3-02-B02 (0-6)	TCLP	Solid	3010A	365091
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	3010A	365091
500-121261-12	1314V3-02-B02 (6-12)D	TCLP	Solid	3010A	365091

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals (Continued)

### Prep Batch: 365242 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	3010A	365091
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	3010A	365091
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	3010A	365091
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	3010A	365091
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	3010A	365091
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	3010A	365091
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	3010A	365091
LB 500-365091/1-B	Method Blank	TCLP	Solid	3010A	365091
LCS 500-365242/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-121261-19 MS	1314V3-11-B01 (0-1)	TCLP	Solid	3010A	365091
500-121261-19 DU	1314V3-11-B01 (0-1)	TCLP	Solid	3010A	365091

### Prep Batch: 365288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	TCLP	Solid	7470A	365091
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	7470A	365091
500-121261-3	1314V3-01-B36 (16-24)	TCLP	Solid	7470A	365091
500-121261-4	1314V3-01-B36 (24-28)	TCLP	Solid	7470A	365091
500-121261-5	1314V3-02-B01 (0-5)	TCLP	Solid	7470A	365091
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	7470A	365091
500-121261-10	1314V3-02-B02 (0-6)	TCLP	Solid	7470A	365091
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	7470A	365091
500-121261-12	1314V3-02-B02 (6-12)D	TCLP	Solid	7470A	365091
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	7470A	365091
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	7470A	365091
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	7470A	365091
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	7470A	365091
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	7470A	365091
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	7470A	365091
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	7470A	365091
LB 500-365091/1-C	Method Blank	TCLP	Solid	7470A	365091
MB 500-365288/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-365288/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-121261-1 MS	1314V3-01-B36 (0-8)	TCLP	Solid	7470A	365091
500-121261-1 DU	1314V3-01-B36 (0-8)	TCLP	Solid	7470A	365091

### Analysis Batch: 365298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	365139
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	7471B	365139
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	7471B	365139
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	7471B	365139
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	7471B	365139
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	7471B	365139
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	7471B	365139
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	7471B	365139
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	7471B	365139
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	7471B	365139
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	7471B	365139
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	7471B	365139
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	7471B	365139

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals (Continued)

### Analysis Batch: 365298 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	7471B	365139
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	7471B	365139
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	7471B	365139
MB 500-365139/12-A	Method Blank	Total/NA	Solid	7471B	365139
LCS 500-365139/13-A	Lab Control Sample	Total/NA	Solid	7471B	365139
500-121261-1 MS	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	365139
500-121261-1 MSD	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	365139
500-121261-1 DU	1314V3-01-B36 (0-8)	Total/NA	Solid	7471B	365139

### Analysis Batch: 365431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	SPLP East	Solid	6010B	365114
500-121261-2	1314V3-01-B36 (8-16)	SPLP East	Solid	6010B	365114
500-121261-3	1314V3-01-B36 (16-24)	SPLP East	Solid	6010B	365114
500-121261-6	1314V3-02-B01 (5-10)	SPLP East	Solid	6010B	365114
500-121261-10	1314V3-02-B02 (0-6)	SPLP East	Solid	6010B	365114
500-121261-11	1314V3-02-B02 (6-12)	SPLP East	Solid	6010B	365114
500-121261-12	1314V3-02-B02 (6-12)D	SPLP East	Solid	6010B	365114
500-121261-13	1314V3-06-B01 (0-8)	SPLP East	Solid	6010B	365114
500-121261-14	1314V3-06-B02 (0-8)	SPLP East	Solid	6010B	365114
500-121261-15	1314V3-06-B03 (0-4)	SPLP East	Solid	6010B	365114
500-121261-16	1314V3-11-B03 (0-1)	SPLP East	Solid	6010B	365114
500-121261-17	1314V3-11-B03 (0-1)D	SPLP East	Solid	6010B	365114
500-121261-18	1314V3-11-B02 (0-1)	SPLP East	Solid	6010B	365114
LB 500-364903/1-B	Method Blank	SPLP East	Solid	6010B	365114
LCS 500-365114/2-A	Lab Control Sample	Total/NA	Solid	6010B	365114

### Analysis Batch: 365435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	TCLP	Solid	6010B	365242
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	6010B	365242
500-121261-3	1314V3-01-B36 (16-24)	TCLP	Solid	6010B	365242
500-121261-4	1314V3-01-B36 (24-28)	TCLP	Solid	6010B	365242
500-121261-5	1314V3-02-B01 (0-5)	TCLP	Solid	6010B	365242
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	6010B	365242
500-121261-10	1314V3-02-B02 (0-6)	TCLP	Solid	6010B	365242
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	6010B	365242
500-121261-12	1314V3-02-B02 (6-12)D	TCLP	Solid	6010B	365242
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	6010B	365242
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	6010B	365242
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	6010B	365242
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	6010B	365242
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	6010B	365242
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	6010B	365242
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	6010B	365242
LB 500-365091/1-B	Method Blank	TCLP	Solid	6010B	365242
LCS 500-365242/2-A	Lab Control Sample	Total/NA	Solid	6010B	365242
500-121261-19 MS	1314V3-11-B01 (0-1)	TCLP	Solid	6010B	365242
500-121261-19 DU	1314V3-11-B01 (0-1)	TCLP	Solid	6010B	365242

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals (Continued)

### Analysis Batch: 365446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	TCLP	Solid	6020A	365242
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	6020A	365242
500-121261-3	1314V3-01-B36 (16-24)	TCLP	Solid	6020A	365242
500-121261-4	1314V3-01-B36 (24-28)	TCLP	Solid	6020A	365242
500-121261-5	1314V3-02-B01 (0-5)	TCLP	Solid	6020A	365242
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	6020A	365242
500-121261-10	1314V3-02-B02 (0-6)	TCLP	Solid	6020A	365242
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	6020A	365242
500-121261-12	1314V3-02-B02 (6-12)D	TCLP	Solid	6020A	365242
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	6020A	365242
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	6020A	365242
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	6020A	365242
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	6020A	365242
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	6020A	365242
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	6020A	365242
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	6020A	365242
LB 500-365091/1-B	Method Blank	TCLP	Solid	6020A	365242
LCS 500-365242/2-A	Lab Control Sample	Total/NA	Solid	6020A	365242
500-121261-19 MS	1314V3-11-B01 (0-1)	TCLP	Solid	6020A	365242
500-121261-19 DU	1314V3-11-B01 (0-1)	TCLP	Solid	6020A	365242

### Analysis Batch: 365454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-7	1314V3-02-G01	Total Recoverable	Water	6020A	364441
500-121261-8	1314V3-02-G01D	Total Recoverable	Water	6020A	364441

### Analysis Batch: 365486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	TCLP	Solid	7470A	365288
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	7470A	365288
500-121261-3	1314V3-01-B36 (16-24)	TCLP	Solid	7470A	365288
500-121261-4	1314V3-01-B36 (24-28)	TCLP	Solid	7470A	365288
500-121261-5	1314V3-02-B01 (0-5)	TCLP	Solid	7470A	365288
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	7470A	365288
500-121261-10	1314V3-02-B02 (0-6)	TCLP	Solid	7470A	365288
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	7470A	365288
500-121261-12	1314V3-02-B02 (6-12)D	TCLP	Solid	7470A	365288
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	7470A	365288
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	7470A	365288
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	7470A	365288
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	7470A	365288
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	7470A	365288
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	7470A	365288
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	7470A	365288
LB 500-365091/1-C	Method Blank	TCLP	Solid	7470A	365288
MB 500-365288/12-A	Method Blank	Total/NA	Solid	7470A	365288
LCS 500-365288/13-A	Lab Control Sample	Total/NA	Solid	7470A	365288
500-121261-1 MS	1314V3-01-B36 (0-8)	TCLP	Solid	7470A	365288
500-121261-1 DU	1314V3-01-B36 (0-8)	TCLP	Solid	7470A	365288

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals (Continued)

### Analysis Batch: 365635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	6010B	365146
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	6010B	365146
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	6010B	365146
500-121261-4	1314V3-01-B36 (24-28)	SPLP East	Solid	6010B	365114
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	6010B	365146
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	6010B	365146
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	6010B	365146
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	6010B	365146
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	6010B	365146
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	6010B	365146
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	6010B	365146
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	6010B	365146
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	6010B	365146
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	6010B	365146
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	6010B	365146
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	6010B	365146
500-121261-19	1314V3-11-B01 (0-1)	SPLP East	Solid	6010B	365114
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146
MB 500-365146/1-A	Method Blank	Total/NA	Solid	6010B	365146
LCS 500-365146/2-A	Lab Control Sample	Total/NA	Solid	6010B	365146
500-121261-19 MS	1314V3-11-B01 (0-1)	SPLP East	Solid	6010B	365114
500-121261-19 MS	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146
500-121261-19 MSD	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146
500-121261-19 DU	1314V3-11-B01 (0-1)	SPLP East	Solid	6010B	365114
500-121261-19 DU	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146

### Leach Batch: 365637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	1311	
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	1311	
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	1311	
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	1311	
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	1311	
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	1311	
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	1311	
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	1311	
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	1311	
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	1311	
LB 500-365637/1-B	Method Blank	TCLP	Solid	1311	
500-121261-13 MS	1314V3-06-B01 (0-8)	TCLP	Solid	1311	
500-121261-13 DU	1314V3-06-B01 (0-8)	TCLP	Solid	1311	

### Analysis Batch: 365688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	6010B	365146
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	6010B	365146
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	6010B	365146
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	6010B	365146
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	6010B	365146
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	6010B	365146
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	6010B	365146

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Metals (Continued)

### Analysis Batch: 365688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	6010B	365146
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	6010B	365146
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	6010B	365146
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146
500-121261-19 MS	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146
500-121261-19 MSD	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146
500-121261-19 DU	1314V3-11-B01 (0-1)	Total/NA	Solid	6010B	365146

### Prep Batch: 365718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	3010A	365637
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	3010A	365637
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	3010A	365637
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	3010A	365637
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	3010A	365637
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	3010A	365637
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	3010A	365637
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	3010A	365637
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	3010A	365637
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	3010A	365637
LB 500-365637/1-B	Method Blank	TCLP	Solid	3010A	365637
LCS 500-365718/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-121261-13 MS	1314V3-06-B01 (0-8)	TCLP	Solid	3010A	365637
500-121261-13 DU	1314V3-06-B01 (0-8)	TCLP	Solid	3010A	365637

### Analysis Batch: 365876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-2	1314V3-01-B36 (8-16)	TCLP	Solid	6010B	365718
500-121261-6	1314V3-02-B01 (5-10)	TCLP	Solid	6010B	365718
500-121261-11	1314V3-02-B02 (6-12)	TCLP	Solid	6010B	365718
500-121261-13	1314V3-06-B01 (0-8)	TCLP	Solid	6010B	365718
500-121261-14	1314V3-06-B02 (0-8)	TCLP	Solid	6010B	365718
500-121261-15	1314V3-06-B03 (0-4)	TCLP	Solid	6010B	365718
500-121261-16	1314V3-11-B03 (0-1)	TCLP	Solid	6010B	365718
500-121261-17	1314V3-11-B03 (0-1)D	TCLP	Solid	6010B	365718
500-121261-18	1314V3-11-B02 (0-1)	TCLP	Solid	6010B	365718
500-121261-19	1314V3-11-B01 (0-1)	TCLP	Solid	6010B	365718
LB 500-365637/1-B	Method Blank	TCLP	Solid	6010B	365718
LCS 500-365718/2-A	Lab Control Sample	Total/NA	Solid	6010B	365718
500-121261-13 MS	1314V3-06-B01 (0-8)	TCLP	Solid	6010B	365718
500-121261-13 DU	1314V3-06-B01 (0-8)	TCLP	Solid	6010B	365718

## General Chemistry

### Analysis Batch: 364872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	Moisture	
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	Moisture	
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	Moisture	
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# QC Association Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## General Chemistry (Continued)

### Analysis Batch: 364872 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	Moisture	
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	Moisture	
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	Moisture	
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	Moisture	
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	Moisture	
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	Moisture	
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	Moisture	
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	Moisture	
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	Moisture	
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	Moisture	
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	Moisture	
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	Moisture	
500-121261-2 DU	1314V3-01-B36 (8-16)	Total/NA	Solid	Moisture	

### Analysis Batch: 365174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-121261-1	1314V3-01-B36 (0-8)	Total/NA	Solid	9045D	
500-121261-2	1314V3-01-B36 (8-16)	Total/NA	Solid	9045D	
500-121261-3	1314V3-01-B36 (16-24)	Total/NA	Solid	9045D	
500-121261-4	1314V3-01-B36 (24-28)	Total/NA	Solid	9045D	
500-121261-5	1314V3-02-B01 (0-5)	Total/NA	Solid	9045D	
500-121261-6	1314V3-02-B01 (5-10)	Total/NA	Solid	9045D	
500-121261-10	1314V3-02-B02 (0-6)	Total/NA	Solid	9045D	
500-121261-11	1314V3-02-B02 (6-12)	Total/NA	Solid	9045D	
500-121261-12	1314V3-02-B02 (6-12)D	Total/NA	Solid	9045D	
500-121261-13	1314V3-06-B01 (0-8)	Total/NA	Solid	9045D	
500-121261-14	1314V3-06-B02 (0-8)	Total/NA	Solid	9045D	
500-121261-15	1314V3-06-B03 (0-4)	Total/NA	Solid	9045D	
500-121261-16	1314V3-11-B03 (0-1)	Total/NA	Solid	9045D	
500-121261-17	1314V3-11-B03 (0-1)D	Total/NA	Solid	9045D	
500-121261-18	1314V3-11-B02 (0-1)	Total/NA	Solid	9045D	
500-121261-19	1314V3-11-B01 (0-1)	Total/NA	Solid	9045D	
500-121261-1 DU	1314V3-01-B36 (0-8)	Total/NA	Solid	9045D	

# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - VOC

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	12DCE	TOL
		(71-120)	(70-120)	(71-127)	(75-120)
500-121261-7	1314V3-02-G01	92	91	104	91
500-121261-8	1314V3-02-G01D	89	90	100	93
500-121261-9	1314V3-00-TB03	90	92	105	91
LCS 500-365402/4	Lab Control Sample	90	95	103	91
LCS 500-365839/5	Lab Control Sample	90	96	101	92
MB 500-365402/6	Method Blank	92	92	101	92
MB 500-365839/7	Method Blank	92	92	103	91

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	12DCE	TOL
		(70-120)	(75-120)	(69-134)	(75-123)
500-121261-1	1314V3-01-B36 (0-8)	97	102	105	101
500-121261-2	1314V3-01-B36 (8-16)	105	96	101	102
500-121261-3	1314V3-01-B36 (16-24)	105	99	108	101
500-121261-4	1314V3-01-B36 (24-28)	111	97	103	105
500-121261-5	1314V3-02-B01 (0-5)	112	87	111	104
500-121261-6	1314V3-02-B01 (5-10)	110	97	108	102
500-121261-10	1314V3-02-B02 (0-6)	106	100	110	103
500-121261-11	1314V3-02-B02 (6-12)	109	101	109	103
500-121261-12	1314V3-02-B02 (6-12)D	109	100	109	102
500-121261-13	1314V3-06-B01 (0-8)	137 * X	91	88	124 X
500-121261-14	1314V3-06-B02 (0-8)	110	99	111	106
500-121261-15	1314V3-06-B03 (0-4)	108	99	109	103
500-121261-16	1314V3-11-B03 (0-1)	109	99	108	105
500-121261-17	1314V3-11-B03 (0-1)D	110	98	111	104
500-121261-18	1314V3-11-B02 (0-1)	110	104	114	103
500-121261-19	1314V3-11-B01 (0-1)	108	99	108	105
500-121261-19	1314V3-11-B01 (0-1)	111	97	105	108
LCS 500-364545/5	Lab Control Sample	98	92	94	100
LCS 500-364610/5	Lab Control Sample	105	93	96	105
LCS 500-364836/4	Lab Control Sample	104	90	94	109
LCSD 500-364545/25	Lab Control Sample Dup	103	97	101	106
LCSD 500-364610/6	Lab Control Sample Dup	101	94	96	105
MB 500-364545/6	Method Blank	104	94	95	98
MB 500-364610/8	Method Blank	108	91	92	105
MB 500-364836/6	Method Blank	111	98	104	106

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

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# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

TOL = Toluene-d8 (Surr)

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

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)
500-121261-1	1314V3-01-B36 (0-8)	102	106	88	87	67	104
500-121261-2	1314V3-01-B36 (8-16)	88	83	82	78	74	96
500-121261-3	1314V3-01-B36 (16-24)	103	104	87	90	67	107
500-121261-4	1314V3-01-B36 (24-28)	95	91	85	83	61	96
500-121261-5	1314V3-02-B01 (0-5)	74	89	78	76	46	90
500-121261-6	1314V3-02-B01 (5-10)	86	89	76	75	68	144
500-121261-6 - DL	1314V3-02-B01 (5-10)	93	72	82	76	69	98
500-121261-10	1314V3-02-B02 (0-6)	95	95	82	83	59	97
500-121261-11	1314V3-02-B02 (6-12)	79	61	70	67	45	84
500-121261-12	1314V3-02-B02 (6-12)D	63	50	52	55	44	77
500-121261-13	1314V3-06-B01 (0-8)	77	77	70	68	49	85
500-121261-14	1314V3-06-B02 (0-8)	90	84	85	83	63	110
500-121261-15	1314V3-06-B03 (0-4)	93	91	81	79	63	103
500-121261-16	1314V3-11-B03 (0-1)	80	76	73	72	58	106
500-121261-17	1314V3-11-B03 (0-1)D	79	80	72	74	62	116
500-121261-18	1314V3-11-B02 (0-1)	84	85	77	76	51	130
500-121261-19	1314V3-11-B01 (0-1)	83	84	75	73	62	95
500-121261-19 MS	1314V3-11-B01 (0-1)	89	102	81	78	74	93
500-121261-19 MSD	1314V3-11-B01 (0-1)	96	107	90	84	79	96
LCS 500-365830/2-A	Lab Control Sample	99	91	88	88	85	93
MB 500-365830/1-A	Method Blank	99	96	90	90	53	106

### Surrogate Legend

2FP = 2-Fluorophenol  
PHL = Phenol-d5  
NBZ = Nitrobenzene-d5  
FBP = 2-Fluorobiphenyl  
TBP = 2,4,6-Tribromophenol  
TPH = Terphenyl-d14

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (30-150)	FBP (30-123)	2FP (30-110)	NBZ (33-139)	PHL (20-100)	TPH (42-150)
500-121261-7	1314V3-02-G01	102	62	48	62	34	106
500-121261-8	1314V3-02-G01D	116	78	55	73	37	116
LCS 500-364764/2-A	Lab Control Sample	106	78	74	81	58	105
LCSD 500-364764/3-A	Lab Control Sample Dup	101	74	70	79	53	102
MB 500-364764/1-A	Method Blank	81	81	56	81	39	120

### Surrogate Legend

TBP = 2,4,6-Tribromophenol  
FBP = 2-Fluorobiphenyl  
2FP = 2-Fluorophenol  
NBZ = Nitrobenzene-d5  
PHL = Phenol-d5

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# Surrogate Summary

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

TPH = Terphenyl-d14

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCB1
		(41-124)	(47-127)
500-121261-13	1314V3-06-B01 (0-8)	85	97
LCS 500-364935/3-A	Lab Control Sample	74	94
MB 500-364935/1-A	Method Blank	76	96

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - VOC

**Lab Sample ID: MB 500-365402/6**  
**Matrix: Water**  
**Analysis Batch: 365402**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0017	mg/L			12/16/16 12:46	1
Benzene	<0.00050		0.00050	0.00015	mg/L			12/16/16 12:46	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/L			12/16/16 12:46	1
Bromoform	<0.0010		0.0010	0.00048	mg/L			12/16/16 12:46	1
Bromomethane	<0.0020		0.0020	0.00080	mg/L			12/16/16 12:46	1
Carbon disulfide	<0.0020		0.0020	0.00045	mg/L			12/16/16 12:46	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/L			12/16/16 12:46	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/L			12/16/16 12:46	1
Chloroethane	<0.0010		0.0010	0.00051	mg/L			12/16/16 12:46	1
Chloroform	<0.0010		0.0010	0.00037	mg/L			12/16/16 12:46	1
Chloromethane	<0.0010		0.0010	0.00032	mg/L			12/16/16 12:46	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/L			12/16/16 12:46	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/L			12/16/16 12:46	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/L			12/16/16 12:46	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/L			12/16/16 12:46	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/L			12/16/16 12:46	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/L			12/16/16 12:46	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/L			12/16/16 12:46	1
1,3-Dichloropropene, Total	<0.0010		0.0010	0.00042	mg/L			12/16/16 12:46	1
Ethylbenzene	<0.00050		0.00050	0.00018	mg/L			12/16/16 12:46	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/L			12/16/16 12:46	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0021	mg/L			12/16/16 12:46	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/L			12/16/16 12:46	1
methyl isobutyl ketone	<0.0050		0.0050	0.0022	mg/L			12/16/16 12:46	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/L			12/16/16 12:46	1
Styrene	<0.0010		0.0010	0.00039	mg/L			12/16/16 12:46	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/L			12/16/16 12:46	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/L			12/16/16 12:46	1
Toluene	<0.00050		0.00050	0.00015	mg/L			12/16/16 12:46	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/L			12/16/16 12:46	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/L			12/16/16 12:46	1
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/L			12/16/16 12:46	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/L			12/16/16 12:46	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/L			12/16/16 12:46	1
Vinyl acetate	<0.0020		0.0020	0.00091	mg/L			12/16/16 12:46	1
Vinyl chloride	<0.00050		0.00050	0.00020	mg/L			12/16/16 12:46	1
Xylenes, Total	<0.0010		0.0010	0.00022	mg/L			12/16/16 12:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		71 - 120		12/16/16 12:46	1
Dibromofluoromethane	92		70 - 120		12/16/16 12:46	1
1,2-Dichloroethane-d4 (Surr)	101		71 - 127		12/16/16 12:46	1
Toluene-d8 (Surr)	92		75 - 120		12/16/16 12:46	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - VOC (Continued)

**Lab Sample ID: LCS 500-365402/4**

**Matrix: Water**

**Analysis Batch: 365402**

**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	0.0517		mg/L		103	37 - 141
Benzene	0.0500	0.0447		mg/L		89	70 - 125
Bromodichloromethane	0.0500	0.0444		mg/L		89	70 - 125
Bromoform	0.0500	0.0442		mg/L		88	54 - 128
Bromomethane	0.0500	0.0323		mg/L		65	40 - 150
Carbon disulfide	0.0500	0.0421		mg/L		84	68 - 125
Carbon tetrachloride	0.0500	0.0467		mg/L		93	70 - 125
Chlorobenzene	0.0500	0.0445		mg/L		89	70 - 125
Chloroethane	0.0500	0.0435		mg/L		87	60 - 139
Chloroform	0.0500	0.0451		mg/L		90	70 - 125
Chloromethane	0.0500	0.0579		mg/L		116	60 - 140
cis-1,2-Dichloroethene	0.0500	0.0451		mg/L		90	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0439		mg/L		88	70 - 125
Dibromochloromethane	0.0500	0.0440		mg/L		88	66 - 125
1,1-Dichloroethane	0.0500	0.0468		mg/L		94	70 - 125
1,2-Dichloroethane	0.0500	0.0476		mg/L		95	70 - 125
1,1-Dichloroethene	0.0500	0.0421		mg/L		84	70 - 125
1,2-Dichloropropane	0.0500	0.0486		mg/L		97	70 - 125
Ethylbenzene	0.0500	0.0441		mg/L		88	70 - 125
2-Hexanone	0.0500	0.0557		mg/L		111	49 - 139
Methyl Ethyl Ketone	0.0500	0.0609		mg/L		122	52 - 142
Methylene Chloride	0.0500	0.0426		mg/L		85	68 - 125
methyl isobutyl ketone	0.0500	0.0528		mg/L		106	47 - 140
Methyl tert-butyl ether	0.0500	0.0458		mg/L		92	67 - 125
Styrene	0.0500	0.0453		mg/L		91	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0457		mg/L		91	68 - 125
Tetrachloroethene	0.0500	0.0480		mg/L		96	70 - 125
Toluene	0.0500	0.0452		mg/L		90	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0437		mg/L		87	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0440		mg/L		88	70 - 125
1,1,1-Trichloroethane	0.0500	0.0468		mg/L		94	70 - 125
1,1,2-Trichloroethane	0.0500	0.0440		mg/L		88	70 - 125
Trichloroethene	0.0500	0.0464		mg/L		93	70 - 125
Vinyl acetate	0.0500	0.0414		mg/L		83	30 - 160
Vinyl chloride	0.0500	0.0539		mg/L		108	70 - 126
Xylenes, Total	0.100	0.0896		mg/L		90	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		71 - 120
Dibromofluoromethane	95		70 - 120
1,2-Dichloroethane-d4 (Surr)	103		71 - 127
Toluene-d8 (Surr)	91		75 - 120

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - VOC (Continued)

**Lab Sample ID: MB 500-365839/7**

**Matrix: Water**

**Analysis Batch: 365839**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0017	mg/L			12/20/16 00:34	1
Benzene	<0.00050		0.00050	0.00015	mg/L			12/20/16 00:34	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/L			12/20/16 00:34	1
Bromoform	<0.0010		0.0010	0.00048	mg/L			12/20/16 00:34	1
Bromomethane	<0.0020		0.0020	0.00080	mg/L			12/20/16 00:34	1
Carbon disulfide	<0.0020		0.0020	0.00045	mg/L			12/20/16 00:34	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/L			12/20/16 00:34	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/L			12/20/16 00:34	1
Chloroethane	<0.0010		0.0010	0.00051	mg/L			12/20/16 00:34	1
Chloroform	<0.0010		0.0010	0.00037	mg/L			12/20/16 00:34	1
Chloromethane	<0.0010		0.0010	0.00032	mg/L			12/20/16 00:34	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/L			12/20/16 00:34	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/L			12/20/16 00:34	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/L			12/20/16 00:34	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/L			12/20/16 00:34	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/L			12/20/16 00:34	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/L			12/20/16 00:34	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/L			12/20/16 00:34	1
1,3-Dichloropropene, Total	<0.0010		0.0010	0.00042	mg/L			12/20/16 00:34	1
Ethylbenzene	<0.00050		0.00050	0.00018	mg/L			12/20/16 00:34	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/L			12/20/16 00:34	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0021	mg/L			12/20/16 00:34	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/L			12/20/16 00:34	1
methyl isobutyl ketone	<0.0050		0.0050	0.0022	mg/L			12/20/16 00:34	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/L			12/20/16 00:34	1
Styrene	<0.0010		0.0010	0.00039	mg/L			12/20/16 00:34	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/L			12/20/16 00:34	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/L			12/20/16 00:34	1
Toluene	<0.00050		0.00050	0.00015	mg/L			12/20/16 00:34	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/L			12/20/16 00:34	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/L			12/20/16 00:34	1
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/L			12/20/16 00:34	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/L			12/20/16 00:34	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/L			12/20/16 00:34	1
Vinyl acetate	<0.0020		0.0020	0.00091	mg/L			12/20/16 00:34	1
Vinyl chloride	<0.00050		0.00050	0.00020	mg/L			12/20/16 00:34	1
Xylenes, Total	<0.0010		0.0010	0.00022	mg/L			12/20/16 00:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		71 - 120		12/20/16 00:34	1
Dibromofluoromethane	92		70 - 120		12/20/16 00:34	1
1,2-Dichloroethane-d4 (Surr)	103		71 - 127		12/20/16 00:34	1
Toluene-d8 (Surr)	91		75 - 120		12/20/16 00:34	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - VOC (Continued)

**Lab Sample ID: LCS 500-365839/5**

**Matrix: Water**

**Analysis Batch: 365839**

**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	0.0438		mg/L		88	37 - 141
Benzene	0.0500	0.0461		mg/L		92	70 - 125
Bromodichloromethane	0.0500	0.0441		mg/L		88	70 - 125
Bromoform	0.0500	0.0427		mg/L		85	54 - 128
Bromomethane	0.0500	0.0304		mg/L		61	40 - 150
Carbon disulfide	0.0500	0.0464		mg/L		93	68 - 125
Carbon tetrachloride	0.0500	0.0474		mg/L		95	70 - 125
Chlorobenzene	0.0500	0.0449		mg/L		90	70 - 125
Chloroethane	0.0500	0.0433		mg/L		87	60 - 139
Chloroform	0.0500	0.0461		mg/L		92	70 - 125
Chloromethane	0.0500	0.0579		mg/L		116	60 - 140
cis-1,2-Dichloroethene	0.0500	0.0453		mg/L		91	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0443		mg/L		89	70 - 125
Dibromochloromethane	0.0500	0.0433		mg/L		87	66 - 125
1,1-Dichloroethane	0.0500	0.0480		mg/L		96	70 - 125
1,2-Dichloroethane	0.0500	0.0486		mg/L		97	70 - 125
1,1-Dichloroethene	0.0500	0.0458		mg/L		92	70 - 125
1,2-Dichloropropane	0.0500	0.0487		mg/L		97	70 - 125
Ethylbenzene	0.0500	0.0441		mg/L		88	70 - 125
2-Hexanone	0.0500	0.0455		mg/L		91	49 - 139
Methyl Ethyl Ketone	0.0500	0.0491		mg/L		98	52 - 142
Methylene Chloride	0.0500	0.0425		mg/L		85	68 - 125
methyl isobutyl ketone	0.0500	0.0432		mg/L		86	47 - 140
Methyl tert-butyl ether	0.0500	0.0461		mg/L		92	67 - 125
Styrene	0.0500	0.0452		mg/L		90	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0441		mg/L		88	68 - 125
Tetrachloroethene	0.0500	0.0479		mg/L		96	70 - 125
Toluene	0.0500	0.0453		mg/L		91	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0464		mg/L		93	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0439		mg/L		88	70 - 125
1,1,1-Trichloroethane	0.0500	0.0475		mg/L		95	70 - 125
1,1,2-Trichloroethane	0.0500	0.0435		mg/L		87	70 - 125
Trichloroethene	0.0500	0.0464		mg/L		93	70 - 125
Vinyl acetate	0.0500	0.0442		mg/L		88	30 - 160
Vinyl chloride	0.0500	0.0540		mg/L		108	70 - 126
Xylenes, Total	0.100	0.0897		mg/L		90	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		71 - 120
Dibromofluoromethane	96		70 - 120
1,2-Dichloroethane-d4 (Surr)	101		71 - 127
Toluene-d8 (Surr)	92		75 - 120

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-364545/6**  
**Matrix: Solid**  
**Analysis Batch: 364545**

**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			12/11/16 11:58	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/11/16 11:58	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/11/16 11:58	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/11/16 11:58	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/11/16 11:58	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/11/16 11:58	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/11/16 11:58	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/11/16 11:58	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/11/16 11:58	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/11/16 11:58	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/11/16 11:58	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/11/16 11:58	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/11/16 11:58	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/11/16 11:58	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/11/16 11:58	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/11/16 11:58	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/11/16 11:58	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/11/16 11:58	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/11/16 11:58	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/11/16 11:58	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/11/16 11:58	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/11/16 11:58	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/11/16 11:58	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/11/16 11:58	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/11/16 11:58	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/11/16 11:58	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/11/16 11:58	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/11/16 11:58	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/11/16 11:58	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/11/16 11:58	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/11/16 11:58	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/11/16 11:58	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/11/16 11:58	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/11/16 11:58	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/11/16 11:58	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/11/16 11:58	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/11/16 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 120		12/11/16 11:58	1
Dibromofluoromethane	94		75 - 120		12/11/16 11:58	1
1,2-Dichloroethane-d4 (Surr)	95		69 - 134		12/11/16 11:58	1
Toluene-d8 (Surr)	98		75 - 123		12/11/16 11:58	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364545/5**

**Matrix: Solid**

**Analysis Batch: 364545**

**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	0.0454		mg/Kg		91	40 - 148
Benzene	0.0500	0.0488		mg/Kg		98	70 - 120
Bromodichloromethane	0.0500	0.0495		mg/Kg		99	67 - 120
Bromoform	0.0500	0.0488		mg/Kg		98	50 - 129
Bromomethane	0.0500	0.0499		mg/Kg		100	50 - 134
Carbon disulfide	0.0500	0.0513		mg/Kg		103	67 - 133
Carbon tetrachloride	0.0500	0.0507		mg/Kg		101	65 - 123
Chlorobenzene	0.0500	0.0496		mg/Kg		99	70 - 120
Chloroethane	0.0500	0.0458		mg/Kg		92	40 - 150
Chloroform	0.0500	0.0508		mg/Kg		102	70 - 120
Chloromethane	0.0500	0.0486		mg/Kg		97	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0496		mg/Kg		99	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0506		mg/Kg		101	70 - 120
Dibromochloromethane	0.0500	0.0509		mg/Kg		102	68 - 120
1,1-Dichloroethane	0.0500	0.0503		mg/Kg		101	70 - 125
1,2-Dichloroethane	0.0500	0.0504		mg/Kg		101	65 - 126
1,1-Dichloroethene	0.0500	0.0503		mg/Kg		101	70 - 122
1,2-Dichloropropane	0.0500	0.0478		mg/Kg		96	70 - 126
Ethylbenzene	0.0500	0.0494		mg/Kg		99	70 - 120
2-Hexanone	0.0500	0.0500		mg/Kg		100	51 - 139
2-Butanone (MEK)	0.0500	0.0440		mg/Kg		88	47 - 138
Methylene Chloride	0.0500	0.0482		mg/Kg		96	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0497		mg/Kg		99	51 - 141
Methyl tert-butyl ether	0.0500	0.0442		mg/Kg		88	70 - 121
Styrene	0.0500	0.0495		mg/Kg		99	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0515		mg/Kg		103	70 - 125
Tetrachloroethene	0.0500	0.0498		mg/Kg		100	70 - 122
Toluene	0.0500	0.0499		mg/Kg		100	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0515		mg/Kg		103	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0515		mg/Kg		103	70 - 121
1,1,1-Trichloroethane	0.0500	0.0504		mg/Kg		101	70 - 120
1,1,2-Trichloroethane	0.0500	0.0493		mg/Kg		99	70 - 120
Trichloroethene	0.0500	0.0489		mg/Kg		98	70 - 124
Vinyl acetate	0.0500	0.0374		mg/Kg		75	40 - 150
Vinyl chloride	0.0500	0.0456		mg/Kg		91	64 - 125
Xylenes, Total	0.100	0.102		mg/Kg		102	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 120
Dibromofluoromethane	92		75 - 120
1,2-Dichloroethane-d4 (Surr)	94		69 - 134
Toluene-d8 (Surr)	100		75 - 123



# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-364545/25**

**Matrix: Solid**

**Analysis Batch: 364545**

**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	0.0403		mg/Kg		81	40 - 148	12	30
Benzene	0.0500	0.0425		mg/Kg		85	70 - 120	14	30
Bromodichloromethane	0.0500	0.0442		mg/Kg		88	67 - 120	11	30
Bromoform	0.0500	0.0429		mg/Kg		86	50 - 129	13	30
Bromomethane	0.0500	0.0493		mg/Kg		99	50 - 134	1	30
Carbon disulfide	0.0500	0.0434		mg/Kg		87	67 - 133	17	30
Carbon tetrachloride	0.0500	0.0425		mg/Kg		85	65 - 123	18	30
Chlorobenzene	0.0500	0.0435		mg/Kg		87	70 - 120	13	30
Chloroethane	0.0500	0.0375		mg/Kg		75	40 - 150	20	30
Chloroform	0.0500	0.0448		mg/Kg		90	70 - 120	13	30
Chloromethane	0.0500	0.0431		mg/Kg		86	63 - 135	12	30
cis-1,2-Dichloroethene	0.0500	0.0433		mg/Kg		87	70 - 120	14	30
cis-1,3-Dichloropropene	0.0500	0.0459		mg/Kg		92	70 - 120	10	30
Dibromochloromethane	0.0500	0.0458		mg/Kg		92	68 - 120	10	30
1,1-Dichloroethane	0.0500	0.0443		mg/Kg		89	70 - 125	13	30
1,2-Dichloroethane	0.0500	0.0473		mg/Kg		95	65 - 126	6	30
1,1-Dichloroethene	0.0500	0.0427		mg/Kg		85	70 - 122	16	30
1,2-Dichloropropane	0.0500	0.0433		mg/Kg		87	70 - 126	10	30
Ethylbenzene	0.0500	0.0432		mg/Kg		86	70 - 120	14	30
2-Hexanone	0.0500	0.0436		mg/Kg		87	51 - 139	14	30
2-Butanone (MEK)	0.0500	0.0412		mg/Kg		82	47 - 138	7	30
Methylene Chloride	0.0500	0.0430		mg/Kg		86	70 - 121	11	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0451		mg/Kg		90	51 - 141	10	30
Methyl tert-butyl ether	0.0500	0.0404		mg/Kg		81	70 - 121	9	30
Styrene	0.0500	0.0441		mg/Kg		88	70 - 121	11	30
1,1,1,2-Tetrachloroethane	0.0500	0.0473		mg/Kg		95	70 - 125	9	30
Tetrachloroethene	0.0500	0.0423		mg/Kg		85	70 - 122	16	30
Toluene	0.0500	0.0441		mg/Kg		88	70 - 121	12	30
trans-1,2-Dichloroethene	0.0500	0.0435		mg/Kg		87	70 - 120	17	30
trans-1,3-Dichloropropene	0.0500	0.0463		mg/Kg		93	70 - 121	11	30
1,1,1-Trichloroethane	0.0500	0.0420		mg/Kg		84	70 - 120	18	30
1,1,2-Trichloroethane	0.0500	0.0474		mg/Kg		95	70 - 120	4	30
Trichloroethene	0.0500	0.0417		mg/Kg		83	70 - 124	16	30
Vinyl acetate	0.0500	0.0329		mg/Kg		66	40 - 150	13	30
Vinyl chloride	0.0500	0.0400		mg/Kg		80	64 - 125	13	30
Xylenes, Total	0.100	0.0896		mg/Kg		90	70 - 123	13	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	103		70 - 120
Dibromofluoromethane	97		75 - 120
1,2-Dichloroethane-d4 (Surr)	101		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: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364610/8**

**Matrix: Solid**

**Analysis Batch: 364610**

**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			12/12/16 13:00	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/12/16 13:00	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/12/16 13:00	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/12/16 13:00	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/12/16 13:00	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/12/16 13:00	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/12/16 13:00	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/12/16 13:00	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/12/16 13:00	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/12/16 13:00	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/12/16 13:00	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/12/16 13:00	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/12/16 13:00	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/12/16 13:00	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/12/16 13:00	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/12/16 13:00	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/12/16 13:00	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/12/16 13:00	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/12/16 13:00	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/12/16 13:00	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/12/16 13:00	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/12/16 13:00	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/12/16 13:00	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/12/16 13:00	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/12/16 13:00	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/12/16 13:00	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/12/16 13:00	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/12/16 13:00	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/12/16 13:00	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/12/16 13:00	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/12/16 13:00	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/12/16 13:00	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/12/16 13:00	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/12/16 13:00	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/12/16 13:00	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/12/16 13:00	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/12/16 13:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 120		12/12/16 13:00	1
Dibromofluoromethane	91		75 - 120		12/12/16 13:00	1
1,2-Dichloroethane-d4 (Surr)	92		69 - 134		12/12/16 13:00	1
Toluene-d8 (Surr)	105		75 - 123		12/12/16 13:00	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364610/5**

**Matrix: Solid**

**Analysis Batch: 364610**

**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	0.0450		mg/Kg		90	40 - 148
Benzene	0.0500	0.0459		mg/Kg		92	70 - 120
Bromodichloromethane	0.0500	0.0471		mg/Kg		94	67 - 120
Bromoform	0.0500	0.0445		mg/Kg		89	50 - 129
Bromomethane	0.0500	0.0481		mg/Kg		96	50 - 134
Carbon disulfide	0.0500	0.0502		mg/Kg		100	67 - 133
Carbon tetrachloride	0.0500	0.0479		mg/Kg		96	65 - 123
Chlorobenzene	0.0500	0.0463		mg/Kg		93	70 - 120
Chloroethane	0.0500	0.0672		mg/Kg		134	40 - 150
Chloroform	0.0500	0.0480		mg/Kg		96	70 - 120
Chloromethane	0.0500	0.0506		mg/Kg		101	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0457		mg/Kg		91	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0483		mg/Kg		97	70 - 120
Dibromochloromethane	0.0500	0.0459		mg/Kg		92	68 - 120
1,1-Dichloroethane	0.0500	0.0479		mg/Kg		96	70 - 125
1,2-Dichloroethane	0.0500	0.0464		mg/Kg		93	65 - 126
1,1-Dichloroethene	0.0500	0.0496		mg/Kg		99	70 - 122
1,2-Dichloropropane	0.0500	0.0441		mg/Kg		88	70 - 126
Ethylbenzene	0.0500	0.0478		mg/Kg		96	70 - 120
2-Hexanone	0.0500	0.0460		mg/Kg		92	51 - 139
2-Butanone (MEK)	0.0500	0.0435		mg/Kg		87	47 - 138
Methylene Chloride	0.0500	0.0528		mg/Kg		106	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0476		mg/Kg		95	51 - 141
Methyl tert-butyl ether	0.0500	0.0468		mg/Kg		94	70 - 121
Styrene	0.0500	0.0471		mg/Kg		94	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0490		mg/Kg		98	70 - 125
Tetrachloroethene	0.0500	0.0470		mg/Kg		94	70 - 122
Toluene	0.0500	0.0475		mg/Kg		95	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0484		mg/Kg		97	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0471		mg/Kg		94	70 - 121
1,1,1-Trichloroethane	0.0500	0.0493		mg/Kg		99	70 - 120
1,1,2-Trichloroethane	0.0500	0.0451		mg/Kg		90	70 - 120
Trichloroethene	0.0500	0.0456		mg/Kg		91	70 - 124
Vinyl acetate	0.0500	0.0385		mg/Kg		77	40 - 150
Vinyl chloride	0.0500	0.0522		mg/Kg		104	64 - 125
Xylenes, Total	0.100	0.0987		mg/Kg		99	70 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 120
Dibromofluoromethane	93		75 - 120
1,2-Dichloroethane-d4 (Surr)	96		69 - 134
Toluene-d8 (Surr)	105		75 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-364610/6

Matrix: Solid

Analysis Batch: 364610

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	0.0512		mg/Kg		102	40 - 148	13	30
Benzene	0.0500	0.0519		mg/Kg		104	70 - 120	12	30
Bromodichloromethane	0.0500	0.0519		mg/Kg		104	67 - 120	10	30
Bromoform	0.0500	0.0500		mg/Kg		100	50 - 129	12	30
Bromomethane	0.0500	0.0461		mg/Kg		92	50 - 134	4	30
Carbon disulfide	0.0500	0.0572		mg/Kg		114	67 - 133	13	30
Carbon tetrachloride	0.0500	0.0552		mg/Kg		110	65 - 123	14	30
Chlorobenzene	0.0500	0.0521		mg/Kg		104	70 - 120	12	30
Chloroethane	0.0500	0.0608		mg/Kg		122	40 - 150	10	30
Chloroform	0.0500	0.0541		mg/Kg		108	70 - 120	12	30
Chloromethane	0.0500	0.0472		mg/Kg		94	63 - 135	7	30
cis-1,2-Dichloroethene	0.0500	0.0529		mg/Kg		106	70 - 120	15	30
cis-1,3-Dichloropropene	0.0500	0.0528		mg/Kg		106	70 - 120	9	30
Dibromochloromethane	0.0500	0.0510		mg/Kg		102	68 - 120	11	30
1,1-Dichloroethane	0.0500	0.0542		mg/Kg		108	70 - 125	12	30
1,2-Dichloroethane	0.0500	0.0540		mg/Kg		108	65 - 126	15	30
1,1-Dichloroethene	0.0500	0.0568		mg/Kg		114	70 - 122	14	30
1,2-Dichloropropane	0.0500	0.0502		mg/Kg		100	70 - 126	13	30
Ethylbenzene	0.0500	0.0534		mg/Kg		107	70 - 120	11	30
2-Hexanone	0.0500	0.0522		mg/Kg		104	51 - 139	13	30
2-Butanone (MEK)	0.0500	0.0495		mg/Kg		99	47 - 138	13	30
Methylene Chloride	0.0500	0.0591		mg/Kg		118	70 - 121	11	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0523		mg/Kg		105	51 - 141	9	30
Methyl tert-butyl ether	0.0500	0.0533		mg/Kg		107	70 - 121	13	30
Styrene	0.0500	0.0535		mg/Kg		107	70 - 121	13	30
1,1,1,2-Tetrachloroethane	0.0500	0.0538		mg/Kg		108	70 - 125	9	30
Tetrachloroethene	0.0500	0.0523		mg/Kg		105	70 - 122	11	30
Toluene	0.0500	0.0536		mg/Kg		107	70 - 121	12	30
trans-1,2-Dichloroethene	0.0500	0.0566		mg/Kg		113	70 - 120	16	30
trans-1,3-Dichloropropene	0.0500	0.0521		mg/Kg		104	70 - 121	10	30
1,1,1-Trichloroethane	0.0500	0.0553		mg/Kg		111	70 - 120	12	30
1,1,2-Trichloroethane	0.0500	0.0506		mg/Kg		101	70 - 120	11	30
Trichloroethene	0.0500	0.0511		mg/Kg		102	70 - 124	11	30
Vinyl acetate	0.0500	0.0326		mg/Kg		65	40 - 150	17	30
Vinyl chloride	0.0500	0.0493		mg/Kg		99	64 - 125	6	30
Xylenes, Total	0.100	0.110		mg/Kg		110	70 - 123	11	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane	94		75 - 120
1,2-Dichloroethane-d4 (Surr)	96		69 - 134
Toluene-d8 (Surr)	105		75 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364836/6**

**Matrix: Solid**

**Analysis Batch: 364836**

**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			12/13/16 13:23	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/13/16 13:23	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/13/16 13:23	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/13/16 13:23	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/13/16 13:23	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/13/16 13:23	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/13/16 13:23	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/13/16 13:23	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/13/16 13:23	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/13/16 13:23	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/13/16 13:23	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/13/16 13:23	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/13/16 13:23	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/13/16 13:23	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/13/16 13:23	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/13/16 13:23	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/13/16 13:23	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/13/16 13:23	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/13/16 13:23	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/13/16 13:23	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/13/16 13:23	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/13/16 13:23	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/13/16 13:23	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/13/16 13:23	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/13/16 13:23	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/13/16 13:23	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/13/16 13:23	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/13/16 13:23	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/13/16 13:23	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/13/16 13:23	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/13/16 13:23	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/13/16 13:23	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/13/16 13:23	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/13/16 13:23	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/13/16 13:23	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/13/16 13:23	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/13/16 13:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 120		12/13/16 13:23	1
Dibromofluoromethane	98		75 - 120		12/13/16 13:23	1
1,2-Dichloroethane-d4 (Surr)	104		69 - 134		12/13/16 13:23	1
Toluene-d8 (Surr)	106		75 - 123		12/13/16 13:23	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364836/4**

**Matrix: Solid**

**Analysis Batch: 364836**

**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	0.0432		mg/Kg		86	40 - 148
Benzene	0.0500	0.0463		mg/Kg		93	70 - 120
Bromodichloromethane	0.0500	0.0479		mg/Kg		96	67 - 120
Bromoform	0.0500	0.0415		mg/Kg		83	50 - 129
Bromomethane	0.0500	0.0507		mg/Kg		101	50 - 134
Carbon disulfide	0.0500	0.0510		mg/Kg		102	67 - 133
Carbon tetrachloride	0.0500	0.0485		mg/Kg		97	65 - 123
Chlorobenzene	0.0500	0.0472		mg/Kg		94	70 - 120
Chloroethane	0.0500	0.0672		mg/Kg		134	40 - 150
Chloroform	0.0500	0.0480		mg/Kg		96	70 - 120
Chloromethane	0.0500	0.0492		mg/Kg		98	63 - 135
cis-1,2-Dichloroethene	0.0500	0.0453		mg/Kg		91	70 - 120
cis-1,3-Dichloropropene	0.0500	0.0487		mg/Kg		97	70 - 120
Dibromochloromethane	0.0500	0.0458		mg/Kg		92	68 - 120
1,1-Dichloroethane	0.0500	0.0472		mg/Kg		94	70 - 125
1,2-Dichloroethane	0.0500	0.0478		mg/Kg		96	65 - 126
1,1-Dichloroethene	0.0500	0.0497		mg/Kg		99	70 - 122
1,2-Dichloropropane	0.0500	0.0456		mg/Kg		91	70 - 126
Ethylbenzene	0.0500	0.0488		mg/Kg		98	70 - 120
2-Hexanone	0.0500	0.0421		mg/Kg		84	51 - 139
2-Butanone (MEK)	0.0500	0.0429		mg/Kg		86	47 - 138
Methylene Chloride	0.0500	0.0446		mg/Kg		89	70 - 121
4-Methyl-2-pentanone (MIBK)	0.0500	0.0449		mg/Kg		90	51 - 141
Methyl tert-butyl ether	0.0500	0.0452		mg/Kg		90	70 - 121
Styrene	0.0500	0.0471		mg/Kg		94	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0483		mg/Kg		97	70 - 125
Tetrachloroethene	0.0500	0.0494		mg/Kg		99	70 - 122
Toluene	0.0500	0.0491		mg/Kg		98	70 - 121
trans-1,2-Dichloroethene	0.0500	0.0484		mg/Kg		97	70 - 120
trans-1,3-Dichloropropene	0.0500	0.0492		mg/Kg		98	70 - 121
1,1,1-Trichloroethane	0.0500	0.0498		mg/Kg		100	70 - 120
1,1,2-Trichloroethane	0.0500	0.0477		mg/Kg		95	70 - 120
Trichloroethene	0.0500	0.0456		mg/Kg		91	70 - 124
Vinyl acetate	0.0500	0.0469		mg/Kg		94	40 - 150
Vinyl chloride	0.0500	0.0521		mg/Kg		104	64 - 125
Xylenes, Total	0.100	0.100		mg/Kg		100	70 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 120
Dibromofluoromethane	90		75 - 120
1,2-Dichloroethane-d4 (Surr)	94		69 - 134
Toluene-d8 (Surr)	109		75 - 123

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-364764/1-A**  
**Matrix: Water**  
**Analysis Batch: 364917**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364764**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<0.0016		0.0016	0.00017	mg/L		12/12/16 21:45	12/13/16 23:06	1
1,4-Dichlorobenzene	<0.0016		0.0016	0.00017	mg/L		12/12/16 21:45	12/13/16 23:06	1
1,2-Dichlorobenzene	<0.0016		0.0016	0.00020	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,2'-oxybis[1-chloropropane]	<0.0016		0.0016	0.00030	mg/L		12/12/16 21:45	12/13/16 23:06	1
1,2,4-Trichlorobenzene	<0.0016		0.0016	0.00019	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,4-Dimethylphenol	<0.0080		0.0080	0.0014	mg/L		12/12/16 21:45	12/13/16 23:06	1
2-Chlorophenol	<0.0040		0.0040	0.00045	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,4-Dichlorophenol	<0.0080		0.0080	0.0021	mg/L		12/12/16 21:45	12/13/16 23:06	1
2-Methylphenol	<0.0016		0.0016	0.00024	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,4,6-Trichlorophenol	<0.0040		0.0040	0.00057	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,4,5-Trichlorophenol	<0.0080		0.0080	0.0021	mg/L		12/12/16 21:45	12/13/16 23:06	1
2-Methylnaphthalene	<0.0016		0.0016	0.000052	mg/L		12/12/16 21:45	12/13/16 23:06	1
2-Nitroaniline	<0.0040		0.0040	0.0010	mg/L		12/12/16 21:45	12/13/16 23:06	1
2-Chloronaphthalene	<0.0016		0.0016	0.00019	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,6-Dinitrotoluene	<0.00080		0.00080	0.000059	mg/L		12/12/16 21:45	12/13/16 23:06	1
4-Chloro-3-methylphenol	<0.0080		0.0080	0.0018	mg/L		12/12/16 21:45	12/13/16 23:06	1
2-Nitrophenol	<0.0080		0.0080	0.0020	mg/L		12/12/16 21:45	12/13/16 23:06	1
4-Chloroaniline	<0.0080		0.0080	0.0016	mg/L		12/12/16 21:45	12/13/16 23:06	1
3-Nitroaniline	<0.0080		0.0080	0.0014	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,4-Dinitrophenol	<0.016		0.016	0.0069	mg/L		12/12/16 21:45	12/13/16 23:06	1
2,4-Dinitrotoluene	<0.00080		0.00080	0.00020	mg/L		12/12/16 21:45	12/13/16 23:06	1
Acenaphthylene	<0.00080		0.00080	0.00021	mg/L		12/12/16 21:45	12/13/16 23:06	1
Acenaphthene	<0.00080		0.00080	0.00025	mg/L		12/12/16 21:45	12/13/16 23:06	1
4-Nitrophenol	<0.016		0.016	0.0059	mg/L		12/12/16 21:45	12/13/16 23:06	1
4-Nitroaniline	<0.0080		0.0080	0.0013	mg/L		12/12/16 21:45	12/13/16 23:06	1
4-Bromophenyl phenyl ether	<0.0040		0.0040	0.00043	mg/L		12/12/16 21:45	12/13/16 23:06	1
Bis(2-chloroethoxy)methane	<0.0016		0.0016	0.00023	mg/L		12/12/16 21:45	12/13/16 23:06	1
Bis(2-chloroethyl)ether	<0.0016		0.0016	0.00023	mg/L		12/12/16 21:45	12/13/16 23:06	1
4-Chlorophenyl phenyl ether	<0.0040		0.0040	0.00051	mg/L		12/12/16 21:45	12/13/16 23:06	1
4,6-Dinitro-2-methylphenol	<0.016		0.016	0.0047	mg/L		12/12/16 21:45	12/13/16 23:06	1
Anthracene	<0.00080		0.00080	0.00027	mg/L		12/12/16 21:45	12/13/16 23:06	1
Dibenzofuran	<0.0016		0.0016	0.00021	mg/L		12/12/16 21:45	12/13/16 23:06	1
Carbazole	<0.0040		0.0040	0.00028	mg/L		12/12/16 21:45	12/13/16 23:06	1
Diethyl phthalate	<0.0016		0.0016	0.00029	mg/L		12/12/16 21:45	12/13/16 23:06	1
Dimethyl phthalate	<0.0016		0.0016	0.00025	mg/L		12/12/16 21:45	12/13/16 23:06	1
Di-n-butyl phthalate	<0.0040		0.0040	0.00058	mg/L		12/12/16 21:45	12/13/16 23:06	1
Butyl benzyl phthalate	<0.0016		0.0016	0.00038	mg/L		12/12/16 21:45	12/13/16 23:06	1
Fluoranthene	<0.00080		0.00080	0.00036	mg/L		12/12/16 21:45	12/13/16 23:06	1
Benzo[a]anthracene	<0.00013		0.00013	0.000045	mg/L		12/12/16 21:45	12/13/16 23:06	1
Fluorene	<0.00080		0.00080	0.00020	mg/L		12/12/16 21:45	12/13/16 23:06	1
Chrysene	<0.00016		0.00016	0.000055	mg/L		12/12/16 21:45	12/13/16 23:06	1
Hexachlorobenzene	<0.00040		0.00040	0.000064	mg/L		12/12/16 21:45	12/13/16 23:06	1
3,3'-Dichlorobenzidine	<0.0040		0.0040	0.0014	mg/L		12/12/16 21:45	12/13/16 23:06	1
Hexachlorobutadiene	<0.0040		0.0040	0.00041	mg/L		12/12/16 21:45	12/13/16 23:06	1
Bis(2-ethylhexyl) phthalate	<0.0080		0.0080	0.0014	mg/L		12/12/16 21:45	12/13/16 23:06	1
Hexachlorocyclopentadiene	<0.016		0.016	0.0051	mg/L		12/12/16 21:45	12/13/16 23:06	1
Di-n-octyl phthalate	<0.0080		0.0080	0.00084	mg/L		12/12/16 21:45	12/13/16 23:06	1
Hexachloroethane	<0.0040		0.0040	0.00048	mg/L		12/12/16 21:45	12/13/16 23:06	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-364764/1-A**  
**Matrix: Water**  
**Analysis Batch: 364917**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364764**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<0.00016		0.00016	0.000065	mg/L		12/12/16 21:45	12/13/16 23:06	1
Benzo[k]fluoranthene	<0.00016		0.00016	0.000051	mg/L		12/12/16 21:45	12/13/16 23:06	1
Isophorone	<0.0016		0.0016	0.00030	mg/L		12/12/16 21:45	12/13/16 23:06	1
Benzo[a]pyrene	<0.00016		0.00016	0.000079	mg/L		12/12/16 21:45	12/13/16 23:06	1
Naphthalene	<0.00080		0.00080	0.00025	mg/L		12/12/16 21:45	12/13/16 23:06	1
Indeno[1,2,3-cd]pyrene	<0.00016		0.00016	0.000060	mg/L		12/12/16 21:45	12/13/16 23:06	1
Nitrobenzene	<0.00080		0.00080	0.00036	mg/L		12/12/16 21:45	12/13/16 23:06	1
Dibenz(a,h)anthracene	<0.00024		0.00024	0.000041	mg/L		12/12/16 21:45	12/13/16 23:06	1
Benzo[g,h,i]perylene	<0.00080		0.00080	0.00030	mg/L		12/12/16 21:45	12/13/16 23:06	1
N-Nitrosodi-n-propylamine	<0.00040		0.00040	0.00012	mg/L		12/12/16 21:45	12/13/16 23:06	1
N-Nitrosodiphenylamine	<0.00080		0.00080	0.00030	mg/L		12/12/16 21:45	12/13/16 23:06	1
Pentachlorophenol	<0.016		0.016	0.0032	mg/L		12/12/16 21:45	12/13/16 23:06	1
Phenanthrene	<0.00080		0.00080	0.00024	mg/L		12/12/16 21:45	12/13/16 23:06	1
Phenol	<0.0040		0.0040	0.00054	mg/L		12/12/16 21:45	12/13/16 23:06	1
Pyrene	<0.00080		0.00080	0.00034	mg/L		12/12/16 21:45	12/13/16 23:06	1
3 & 4 Methylphenol	<0.0016		0.0016	0.00036	mg/L		12/12/16 21:45	12/13/16 23:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	56		30 - 110	12/12/16 21:45	12/13/16 23:06	1
Nitrobenzene-d5	81		33 - 139	12/12/16 21:45	12/13/16 23:06	1
2-Fluorobiphenyl	81		30 - 123	12/12/16 21:45	12/13/16 23:06	1
2,4,6-Tribromophenol	81		30 - 150	12/12/16 21:45	12/13/16 23:06	1
Phenol-d5	39		20 - 100	12/12/16 21:45	12/13/16 23:06	1
Terphenyl-d14	120		42 - 150	12/12/16 21:45	12/13/16 23:06	1

**Lab Sample ID: LCS 500-364764/2-A**  
**Matrix: Water**  
**Analysis Batch: 364917**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364764**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,3-Dichlorobenzene	0.0320	0.0219		mg/L		68	21 - 110
1,4-Dichlorobenzene	0.0320	0.0219		mg/L		68	22 - 110
1,2-Dichlorobenzene	0.0320	0.0222		mg/L		69	24 - 110
2,2'-oxybis[1-chloropropane]	0.0320	0.0207		mg/L		65	34 - 110
1,2,4-Trichlorobenzene	0.0320	0.0224		mg/L		70	25 - 110
2,4-Dimethylphenol	0.0320	0.0155		mg/L		48	42 - 115
2-Chlorophenol	0.0320	0.0269		mg/L		84	49 - 110
2,4-Dichlorophenol	0.0320	0.0295		mg/L		92	53 - 123
2-Methylphenol	0.0320	0.0247		mg/L		77	49 - 113
2,4,6-Trichlorophenol	0.0320	0.0291		mg/L		91	61 - 120
2,4,5-Trichlorophenol	0.0320	0.0288		mg/L		90	63 - 121
2-Methylnaphthalene	0.0320	0.0249		mg/L		78	32 - 110
2-Nitroaniline	0.0320	0.0312		mg/L		97	61 - 126
2-Chloronaphthalene	0.0320	0.0272		mg/L		85	38 - 110
2,6-Dinitrotoluene	0.0320	0.0338		mg/L		106	66 - 125
4-Chloro-3-methylphenol	0.0320	0.0307		mg/L		96	63 - 120
2-Nitrophenol	0.0320	0.0293		mg/L		92	51 - 120
4-Chloroaniline	0.0320	0.0255		mg/L		80	15 - 125

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364764/2-A**  
**Matrix: Water**  
**Analysis Batch: 364917**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364764**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3-Nitroaniline	0.0320	0.0277		mg/L		87	42 - 134
2,4-Dinitrophenol	0.0640	0.0560		mg/L		87	20 - 140
2,4-Dinitrotoluene	0.0320	0.0344		mg/L		108	67 - 131
Acenaphthylene	0.0320	0.0276		mg/L		86	48 - 110
Acenaphthene	0.0320	0.0290		mg/L		91	41 - 112
4-Nitrophenol	0.0640	0.0373		mg/L		58	21 - 110
4-Nitroaniline	0.0320	0.0331		mg/L		103	40 - 142
4-Bromophenyl phenyl ether	0.0320	0.0317		mg/L		99	60 - 124
Bis(2-chloroethoxy)methane	0.0320	0.0276		mg/L		86	55 - 115
Bis(2-chloroethyl)ether	0.0320	0.0260		mg/L		81	46 - 110
4-Chlorophenyl phenyl ether	0.0320	0.0310		mg/L		97	55 - 115
4,6-Dinitro-2-methylphenol	0.0640	0.0591		mg/L		92	34 - 152
Anthracene	0.0320	0.0290		mg/L		91	65 - 118
Dibenzofuran	0.0320	0.0300		mg/L		94	54 - 111
Carbazole	0.0320	0.0324		mg/L		101	71 - 132
Diethyl phthalate	0.0320	0.0307		mg/L		96	64 - 126
Dimethyl phthalate	0.0320	0.0308		mg/L		96	66 - 120
Di-n-butyl phthalate	0.0320	0.0308		mg/L		96	67 - 125
Butyl benzyl phthalate	0.0320	0.0321		mg/L		100	63 - 127
Fluoranthene	0.0320	0.0314		mg/L		98	68 - 127
Benzo[a]anthracene	0.0320	0.0300		mg/L		94	69 - 121
Fluorene	0.0320	0.0299		mg/L		94	54 - 113
Chrysene	0.0320	0.0315		mg/L		99	70 - 126
Hexachlorobenzene	0.0320	0.0309		mg/L		97	63 - 127
3,3'-Dichlorobenzidine	0.0320	0.0164	*	mg/L		51	57 - 145
Hexachlorobutadiene	0.0320	0.0217		mg/L		68	20 - 110
Bis(2-ethylhexyl) phthalate	0.0320	0.0321		mg/L		100	60 - 132
Hexachlorocyclopentadiene	0.0320	0.0202		mg/L		63	10 - 110
Di-n-octyl phthalate	0.0320	0.0340		mg/L		106	63 - 133
Hexachloroethane	0.0320	0.0205		mg/L		64	20 - 110
Benzo[b]fluoranthene	0.0320	0.0349		mg/L		109	66 - 133
Benzo[k]fluoranthene	0.0320	0.0337		mg/L		105	64 - 134
Isophorone	0.0320	0.0261		mg/L		81	55 - 120
Benzo[a]pyrene	0.0320	0.0317		mg/L		99	69 - 130
Naphthalene	0.0320	0.0242		mg/L		76	32 - 110
Indeno[1,2,3-cd]pyrene	0.0320	0.0330		mg/L		103	52 - 150
Nitrobenzene	0.0320	0.0271		mg/L		85	49 - 116
Dibenz(a,h)anthracene	0.0320	0.0388		mg/L		121	59 - 145
Benzo[g,h,i]perylene	0.0320	0.0318		mg/L		99	47 - 145
N-Nitrosodi-n-propylamine	0.0320	0.0277		mg/L		87	52 - 122
N-Nitrosodiphenylamine	0.0320	0.0222		mg/L		69	63 - 117
Pentachlorophenol	0.0640	0.0624		mg/L		98	29 - 138
Phenanthrene	0.0320	0.0301		mg/L		94	63 - 121
Phenol	0.0320	0.0193		mg/L		60	33 - 100
Pyrene	0.0320	0.0304		mg/L		95	65 - 122
3 & 4 Methylphenol	0.0320	0.0256		mg/L		80	49 - 114

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-364764/2-A**  
**Matrix: Water**  
**Analysis Batch: 364917**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364764**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	74		30 - 110
Nitrobenzene-d5	81		33 - 139
2-Fluorobiphenyl	78		30 - 123
2,4,6-Tribromophenol	106		30 - 150
Phenol-d5	58		20 - 100
Terphenyl-d14	105		42 - 150

**Lab Sample ID: LCSD 500-364764/3-A**  
**Matrix: Water**  
**Analysis Batch: 364917**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 364764**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	0.0320	0.0189		mg/L		59	21 - 110	15	20
1,4-Dichlorobenzene	0.0320	0.0194		mg/L		61	22 - 110	12	20
1,2-Dichlorobenzene	0.0320	0.0197		mg/L		62	24 - 110	12	20
2,2'-oxybis[1-chloropropane]	0.0320	0.0197		mg/L		62	34 - 110	5	20
1,2,4-Trichlorobenzene	0.0320	0.0199		mg/L		62	25 - 110	12	20
2,4-Dimethylphenol	0.0320	0.0230	*	mg/L		72	42 - 115	39	20
2-Chlorophenol	0.0320	0.0256		mg/L		80	49 - 110	5	20
2,4-Dichlorophenol	0.0320	0.0275		mg/L		86	53 - 123	7	20
2-Methylphenol	0.0320	0.0250		mg/L		78	49 - 113	1	20
2,4,6-Trichlorophenol	0.0320	0.0274		mg/L		86	61 - 120	6	20
2,4,5-Trichlorophenol	0.0320	0.0273		mg/L		85	63 - 121	5	20
2-Methylnaphthalene	0.0320	0.0229		mg/L		71	32 - 110	8	20
2-Nitroaniline	0.0320	0.0297		mg/L		93	61 - 126	5	20
2-Chloronaphthalene	0.0320	0.0251		mg/L		79	38 - 110	8	20
2,6-Dinitrotoluene	0.0320	0.0318		mg/L		99	66 - 125	6	20
4-Chloro-3-methylphenol	0.0320	0.0294		mg/L		92	63 - 120	4	20
2-Nitrophenol	0.0320	0.0275		mg/L		86	51 - 120	6	20
4-Chloroaniline	0.0320	0.0233		mg/L		73	15 - 125	9	20
3-Nitroaniline	0.0320	0.0258		mg/L		81	42 - 134	7	20
2,4-Dinitrophenol	0.0640	0.0499		mg/L		78	20 - 140	11	20
2,4-Dinitrotoluene	0.0320	0.0326		mg/L		102	67 - 131	6	20
Acenaphthylene	0.0320	0.0261		mg/L		82	48 - 110	6	20
Acenaphthene	0.0320	0.0272		mg/L		85	41 - 112	6	20
4-Nitrophenol	0.0640	0.0338		mg/L		53	21 - 110	10	20
4-Nitroaniline	0.0320	0.0324		mg/L		101	40 - 142	2	20
4-Bromophenyl phenyl ether	0.0320	0.0299		mg/L		93	60 - 124	6	20
Bis(2-chloroethoxy)methane	0.0320	0.0268		mg/L		84	55 - 115	3	20
Bis(2-chloroethyl)ether	0.0320	0.0248		mg/L		78	46 - 110	5	20
4-Chlorophenyl phenyl ether	0.0320	0.0292		mg/L		91	55 - 115	6	20
4,6-Dinitro-2-methylphenol	0.0640	0.0572		mg/L		89	34 - 152	3	20
Anthracene	0.0320	0.0285		mg/L		89	65 - 118	2	20
Dibenzofuran	0.0320	0.0281		mg/L		88	54 - 111	6	20
Carbazole	0.0320	0.0320		mg/L		100	71 - 132	1	20
Diethyl phthalate	0.0320	0.0294		mg/L		92	64 - 126	4	20
Dimethyl phthalate	0.0320	0.0293		mg/L		92	66 - 120	5	20
Di-n-butyl phthalate	0.0320	0.0298		mg/L		93	67 - 125	3	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-364764/3-A**  
**Matrix: Water**  
**Analysis Batch: 364917**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 364764**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate	0.0320	0.0309		mg/L		97	63 - 127	4	20
Fluoranthene	0.0320	0.0307		mg/L		96	68 - 127	3	20
Benzo[a]anthracene	0.0320	0.0292		mg/L		91	69 - 121	3	20
Fluorene	0.0320	0.0289		mg/L		90	54 - 113	3	20
Chrysene	0.0320	0.0303		mg/L		95	70 - 126	4	20
Hexachlorobenzene	0.0320	0.0298		mg/L		93	63 - 127	4	20
3,3'-Dichlorobenzidine	0.0320	0.0293	*	mg/L		92	57 - 145	57	20
Hexachlorobutadiene	0.0320	0.0192		mg/L		60	20 - 110	12	20
Bis(2-ethylhexyl) phthalate	0.0320	0.0310		mg/L		97	60 - 132	3	20
Hexachlorocyclopentadiene	0.0320	0.0168		mg/L		53	10 - 110	18	20
Di-n-octyl phthalate	0.0320	0.0333		mg/L		104	63 - 133	2	20
Hexachloroethane	0.0320	0.0179		mg/L		56	20 - 110	14	20
Benzo[b]fluoranthene	0.0320	0.0333		mg/L		104	66 - 133	5	20
Benzo[k]fluoranthene	0.0320	0.0320		mg/L		100	64 - 134	5	20
Isophorone	0.0320	0.0249		mg/L		78	55 - 120	4	20
Benzo[a]pyrene	0.0320	0.0333		mg/L		104	69 - 130	5	20
Naphthalene	0.0320	0.0218		mg/L		68	32 - 110	11	20
Indeno[1,2,3-cd]pyrene	0.0320	0.0313		mg/L		98	52 - 150	5	20
Nitrobenzene	0.0320	0.0261		mg/L		81	49 - 116	4	20
Dibenz(a,h)anthracene	0.0320	0.0370		mg/L		116	59 - 145	5	20
Benzo[g,h,i]perylene	0.0320	0.0297		mg/L		93	47 - 145	7	20
N-Nitrosodi-n-propylamine	0.0320	0.0266		mg/L		83	52 - 122	4	20
N-Nitrosodiphenylamine	0.0320	0.0287	*	mg/L		90	63 - 117	25	20
Pentachlorophenol	0.0640	0.0533		mg/L		83	29 - 138	16	20
Phenanthrene	0.0320	0.0283		mg/L		89	63 - 121	6	20
Phenol	0.0320	0.0181		mg/L		57	33 - 100	7	20
Pyrene	0.0320	0.0288		mg/L		90	65 - 122	6	20
3 & 4 Methylphenol	0.0320	0.0250		mg/L		78	49 - 114	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Fluorophenol	70		30 - 110
Nitrobenzene-d5	79		33 - 139
2-Fluorobiphenyl	74		30 - 123
2,4,6-Tribromophenol	101		30 - 150
Phenol-d5	53		20 - 100
Terphenyl-d14	102		42 - 150

**Lab Sample ID: MB 500-365830/1-A**  
**Matrix: Solid**  
**Analysis Batch: 365886**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 365830**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/19/16 16:12	12/20/16 11:57	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-365830/1-A  
Matrix: Solid  
Analysis Batch: 365886

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 365830

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/19/16 16:12	12/20/16 11:57	1

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# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-365830/1-A**  
**Matrix: Solid**  
**Analysis Batch: 365886**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 365830**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Phenol	<0.17		0.17	0.074	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/19/16 16:12	12/20/16 11:57	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/19/16 16:12	12/20/16 11:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	99		40 - 130	12/19/16 16:12	12/20/16 11:57	1
Nitrobenzene-d5	90		33 - 124	12/19/16 16:12	12/20/16 11:57	1
2-Fluorobiphenyl	90		42 - 115	12/19/16 16:12	12/20/16 11:57	1
2,4,6-Tribromophenol	53		25 - 130	12/19/16 16:12	12/20/16 11:57	1
Phenol-d5	96		36 - 123	12/19/16 16:12	12/20/16 11:57	1
Terphenyl-d14	106		25 - 150	12/19/16 16:12	12/20/16 11:57	1

**Lab Sample ID: LCS 500-365830/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365886**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365830**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,3-Dichlorobenzene	1.33	1.10		mg/Kg		82	56 - 110
1,4-Dichlorobenzene	1.33	1.12		mg/Kg		84	57 - 110
1,2-Dichlorobenzene	1.33	1.12		mg/Kg		84	56 - 110
2,2'-oxybis[1-chloropropane]	1.33	1.21		mg/Kg		91	22 - 133
1,2,4-Trichlorobenzene	1.33	1.17		mg/Kg		88	60 - 116
2,4-Dimethylphenol	1.33	1.14		mg/Kg		85	50 - 120
2-Chlorophenol	1.33	1.23		mg/Kg		92	57 - 117
2,4-Dichlorophenol	1.33	1.12		mg/Kg		84	61 - 116
2-Methylphenol	1.33	1.13		mg/Kg		85	53 - 123
2,4,6-Trichlorophenol	1.33	0.991		mg/Kg		74	50 - 120
2,4,5-Trichlorophenol	1.33	0.893		mg/Kg		67	42 - 119
2-Methylnaphthalene	1.33	1.13		mg/Kg		85	55 - 120
2-Nitroaniline	1.33	1.17		mg/Kg		88	52 - 121
2-Chloronaphthalene	1.33	1.19		mg/Kg		89	57 - 112
2,6-Dinitrotoluene	1.33	1.17		mg/Kg		88	57 - 118
4-Chloro-3-methylphenol	1.33	1.15		mg/Kg		86	59 - 117
2-Nitrophenol	1.33	1.18		mg/Kg		88	58 - 121
4-Chloroaniline	1.33	1.25		mg/Kg		94	10 - 150
3-Nitroaniline	1.33	1.26		mg/Kg		94	20 - 144
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		0	10 - 110
2,4-Dinitrotoluene	1.33	1.18		mg/Kg		89	59 - 119
Acenaphthylene	1.33	1.09		mg/Kg		82	57 - 116
Acenaphthene	1.33	1.16		mg/Kg		87	52 - 113
4-Nitrophenol	2.67	1.62		mg/Kg		61	32 - 123

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-365830/2-A**

**Matrix: Solid**

**Analysis Batch: 365886**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 365830**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitroaniline	1.33	1.51		mg/Kg		113	55 - 146
4-Bromophenyl phenyl ether	1.33	1.17		mg/Kg		88	61 - 124
Bis(2-chloroethoxy)methane	1.33	1.16		mg/Kg		87	59 - 116
Bis(2-chloroethyl)ether	1.33	1.08		mg/Kg		81	53 - 116
4-Chlorophenyl phenyl ether	1.33	1.19		mg/Kg		89	61 - 111
4,6-Dinitro-2-methylphenol	2.67	0.345	J	mg/Kg		13	10 - 110
Anthracene	1.33	1.16		mg/Kg		87	57 - 118
Dibenzofuran	1.33	1.18		mg/Kg		89	59 - 110
Carbazole	1.33	1.40		mg/Kg		105	65 - 137
Diethyl phthalate	1.33	1.21		mg/Kg		91	58 - 117
Dimethyl phthalate	1.33	1.17		mg/Kg		88	60 - 112
Di-n-butyl phthalate	1.33	1.18		mg/Kg		88	61 - 123
Butyl benzyl phthalate	1.33	1.14		mg/Kg		86	61 - 115
Fluoranthene	1.33	1.13		mg/Kg		85	61 - 124
Benzo[a]anthracene	1.33	1.10		mg/Kg		83	63 - 115
Fluorene	1.33	1.16		mg/Kg		87	56 - 115
Chrysene	1.33	1.11		mg/Kg		83	63 - 118
Hexachlorobenzene	1.33	1.21		mg/Kg		91	62 - 126
3,3'-Dichlorobenzidine	1.33	1.00		mg/Kg		75	40 - 110
Hexachlorobutadiene	1.33	1.19		mg/Kg		89	56 - 120
Bis(2-ethylhexyl) phthalate	1.33	1.19		mg/Kg		89	62 - 117
Hexachlorocyclopentadiene	1.33	0.427	J	mg/Kg		32	10 - 116
Di-n-octyl phthalate	1.33	1.16		mg/Kg		87	58 - 129
Hexachloroethane	1.33	1.14		mg/Kg		86	54 - 111
Benzo[b]fluoranthene	1.33	1.12		mg/Kg		84	61 - 123
Benzo[k]fluoranthene	1.33	1.25		mg/Kg		94	59 - 125
Isophorone	1.33	1.12		mg/Kg		84	54 - 120
Benzo[a]pyrene	1.33	1.18		mg/Kg		89	64 - 122
Naphthalene	1.33	1.16		mg/Kg		87	58 - 116
Indeno[1,2,3-cd]pyrene	1.33	1.19		mg/Kg		89	50 - 149
Nitrobenzene	1.33	1.21		mg/Kg		91	56 - 121
Dibenz(a,h)anthracene	1.33	1.22		mg/Kg		92	61 - 134
Benzo[g,h,i]perylene	1.33	1.21		mg/Kg		90	55 - 134
N-Nitrosodi-n-propylamine	1.33	1.19		mg/Kg		89	56 - 119
N-Nitrosodiphenylamine	1.33	1.18		mg/Kg		88	62 - 117
Pentachlorophenol	2.67	0.903		mg/Kg		34	12 - 116
Phenanthrene	1.33	1.16		mg/Kg		87	58 - 125
Phenol	1.33	1.32		mg/Kg		99	55 - 118
Pyrene	1.33	1.12		mg/Kg		84	60 - 115
3 & 4 Methylphenol	1.33	1.20		mg/Kg		90	55 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	99		40 - 130
Nitrobenzene-d5	88		33 - 124
2-Fluorobiphenyl	88		42 - 115
2,4,6-Tribromophenol	85		25 - 130
Phenol-d5	91		36 - 123
Terphenyl-d14	93		25 - 150

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Lab Sample ID: 500-121261-19 MS**  
**Matrix: Solid**  
**Analysis Batch: 365896**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365830**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,3-Dichlorobenzene	<0.19		1.48	1.02		mg/Kg	☼	69	56 - 110
1,4-Dichlorobenzene	<0.19		1.48	1.05		mg/Kg	☼	71	57 - 110
1,2-Dichlorobenzene	<0.19		1.48	1.07		mg/Kg	☼	72	56 - 110
2,2'-oxybis[1-chloropropane]	<0.19		1.48	1.22		mg/Kg	☼	82	22 - 133
1,2,4-Trichlorobenzene	<0.19		1.48	1.08		mg/Kg	☼	73	60 - 116
2,4-Dimethylphenol	<0.37		1.48	1.12		mg/Kg	☼	76	50 - 120
2-Chlorophenol	<0.19		1.48	1.28		mg/Kg	☼	86	57 - 117
2,4-Dichlorophenol	<0.37		1.48	1.28		mg/Kg	☼	86	61 - 116
2-Methylphenol	<0.19		1.48	1.24		mg/Kg	☼	84	53 - 123
2,4,6-Trichlorophenol	<0.37		1.48	1.10		mg/Kg	☼	74	50 - 120
2,4,5-Trichlorophenol	<0.37		1.48	1.28		mg/Kg	☼	87	42 - 119
2-Methylnaphthalene	<0.075		1.48	1.20		mg/Kg	☼	81	55 - 120
2-Nitroaniline	<0.19		1.48	1.67		mg/Kg	☼	113	52 - 121
2-Chloronaphthalene	<0.19		1.48	1.26		mg/Kg	☼	85	57 - 112
2,6-Dinitrotoluene	<0.19		1.48	1.35		mg/Kg	☼	91	57 - 118
4-Chloro-3-methylphenol	<0.37		1.48	1.46		mg/Kg	☼	98	59 - 117
2-Nitrophenol	<0.37		1.48	1.26		mg/Kg	☼	85	58 - 121
4-Chloroaniline	<0.75		1.48	0.947		mg/Kg	☼	64	10 - 150
3-Nitroaniline	<0.37		1.48	1.06		mg/Kg	☼	72	20 - 144
2,4-Dinitrophenol	<0.75 *		2.96	2.64		mg/Kg	☼	89	10 - 110
2,4-Dinitrotoluene	<0.19		1.48	1.30		mg/Kg	☼	87	59 - 119
Acenaphthylene	<0.037		1.48	1.22		mg/Kg	☼	83	57 - 116
Acenaphthene	<0.037		1.48	1.17		mg/Kg	☼	79	52 - 113
4-Nitrophenol	<0.75		2.96	1.87		mg/Kg	☼	63	32 - 123
4-Nitroaniline	<0.37		1.48	1.46		mg/Kg	☼	99	55 - 146
4-Bromophenyl phenyl ether	<0.19		1.48	1.27		mg/Kg	☼	86	61 - 124
Bis(2-chloroethoxy)methane	<0.19		1.48	1.35		mg/Kg	☼	91	59 - 116
Bis(2-chloroethyl)ether	<0.19		1.48	0.859		mg/Kg	☼	58	53 - 116
4-Chlorophenyl phenyl ether	<0.19		1.48	1.30		mg/Kg	☼	88	61 - 111
4,6-Dinitro-2-methylphenol	<0.75		2.96	2.51		mg/Kg	☼	85	10 - 110
Anthracene	0.011 J		1.48	1.30		mg/Kg	☼	87	57 - 118
Dibenzofuran	<0.19		1.48	1.28		mg/Kg	☼	86	59 - 110
Carbazole	<0.19		1.48	1.56		mg/Kg	☼	105	65 - 137
Diethyl phthalate	<0.19		1.48	1.45		mg/Kg	☼	98	58 - 117
Dimethyl phthalate	<0.19		1.48	1.26		mg/Kg	☼	85	60 - 112
Di-n-butyl phthalate	<0.19		1.48	1.32		mg/Kg	☼	89	61 - 123
Butyl benzyl phthalate	<0.19		1.48	1.34		mg/Kg	☼	91	61 - 115
Fluoranthene	0.12		1.48	1.42		mg/Kg	☼	88	61 - 124
Benzo[a]anthracene	0.055		1.48	1.37		mg/Kg	☼	89	63 - 115
Fluorene	<0.037		1.48	1.30		mg/Kg	☼	88	56 - 115
Chrysene	0.062		1.48	1.28		mg/Kg	☼	83	63 - 118
Hexachlorobenzene	<0.075		1.48	1.26		mg/Kg	☼	85	62 - 126
3,3'-Dichlorobenzidine	<0.19	F1 F2	1.48	0.315	F1	mg/Kg	☼	21	40 - 110
Hexachlorobutadiene	<0.19		1.48	1.03		mg/Kg	☼	69	56 - 120
Bis(2-ethylhexyl) phthalate	<0.19		1.48	1.43		mg/Kg	☼	97	62 - 117
Hexachlorocyclopentadiene	<0.75	F1	1.48	<0.74	F1	mg/Kg	☼	0	10 - 116
Di-n-octyl phthalate	<0.19		1.48	1.43		mg/Kg	☼	97	58 - 129
Hexachloroethane	<0.19		1.48	1.07		mg/Kg	☼	72	54 - 111
Benzo[b]fluoranthene	0.11		1.48	1.47		mg/Kg	☼	92	61 - 123
Benzo[k]fluoranthene	0.039		1.48	1.47		mg/Kg	☼	97	59 - 125

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-121261-19 MS**

**Matrix: Solid**

**Analysis Batch: 365896**

**Client Sample ID: 1314V3-11-B01 (0-1)**

**Prep Type: Total/NA**

**Prep Batch: 365830**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Isophorone	<0.19		1.48	1.32		mg/Kg	☼	89	54 - 120
Benzo[a]pyrene	0.074		1.48	1.64		mg/Kg	☼	106	64 - 122
Naphthalene	<0.037		1.48	1.16		mg/Kg	☼	78	58 - 116
Indeno[1,2,3-cd]pyrene	0.039		1.48	1.14		mg/Kg	☼	74	50 - 149
Nitrobenzene	<0.037		1.48	1.41		mg/Kg	☼	95	56 - 121
Dibenz(a,h)anthracene	<0.037		1.48	1.13		mg/Kg	☼	77	61 - 134
Benzo[g,h,i]perylene	0.029	J	1.48	1.03		mg/Kg	☼	68	55 - 134
N-Nitrosodi-n-propylamine	<0.075		1.48	1.52		mg/Kg	☼	103	56 - 119
N-Nitrosodiphenylamine	<0.19		1.48	1.26		mg/Kg	☼	85	62 - 117
Pentachlorophenol	<0.75		2.96	0.806		mg/Kg	☼	27	12 - 116
Phenanthrene	0.053		1.48	1.33		mg/Kg	☼	87	58 - 125
Phenol	<0.19		1.48	1.59		mg/Kg	☼	107	55 - 118
Pyrene	0.10		1.48	1.35		mg/Kg	☼	84	60 - 115
3 & 4 Methylphenol	<0.19		1.48	1.43		mg/Kg	☼	96	55 - 124

Surrogate	MS %Recovery	MS Qualifier	MS Limits
2-Fluorophenol	89		40 - 130
Nitrobenzene-d5	81		33 - 124
2-Fluorobiphenyl	78		42 - 115
2,4,6-Tribromophenol	74		25 - 130
Phenol-d5	102		36 - 123
Terphenyl-d14	93		25 - 150

**Lab Sample ID: 500-121261-19 MSD**

**Matrix: Solid**

**Analysis Batch: 365896**

**Client Sample ID: 1314V3-11-B01 (0-1)**

**Prep Type: Total/NA**

**Prep Batch: 365830**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,3-Dichlorobenzene	<0.19		1.46	0.982		mg/Kg	☼	67	56 - 110	4	30
1,4-Dichlorobenzene	<0.19		1.46	1.02		mg/Kg	☼	70	57 - 110	3	30
1,2-Dichlorobenzene	<0.19		1.46	1.04		mg/Kg	☼	71	56 - 110	3	30
2,2'-oxybis[1-chloropropane]	<0.19		1.46	1.20		mg/Kg	☼	82	22 - 133	2	30
1,2,4-Trichlorobenzene	<0.19		1.46	1.08		mg/Kg	☼	74	60 - 116	0	30
2,4-Dimethylphenol	<0.37		1.46	1.19		mg/Kg	☼	81	50 - 120	5	30
2-Chlorophenol	<0.19		1.46	1.27		mg/Kg	☼	87	57 - 117	0	30
2,4-Dichlorophenol	<0.37		1.46	1.29		mg/Kg	☼	89	61 - 116	1	30
2-Methylphenol	<0.19		1.46	1.25		mg/Kg	☼	86	53 - 123	1	30
2,4,6-Trichlorophenol	<0.37		1.46	1.11		mg/Kg	☼	76	50 - 120	1	30
2,4,5-Trichlorophenol	<0.37		1.46	1.28		mg/Kg	☼	88	42 - 119	0	30
2-Methylnaphthalene	<0.075		1.46	1.19		mg/Kg	☼	82	55 - 120	1	30
2-Nitroaniline	<0.19		1.46	1.66		mg/Kg	☼	114	52 - 121	1	30
2-Chloronaphthalene	<0.19		1.46	1.25		mg/Kg	☼	85	57 - 112	1	30
2,6-Dinitrotoluene	<0.19		1.46	1.34		mg/Kg	☼	92	57 - 118	1	30
4-Chloro-3-methylphenol	<0.37		1.46	1.48		mg/Kg	☼	101	59 - 117	2	30
2-Nitrophenol	<0.37		1.46	1.28		mg/Kg	☼	87	58 - 121	1	30
4-Chloroaniline	<0.75		1.46	1.06		mg/Kg	☼	72	10 - 150	11	30
3-Nitroaniline	<0.37		1.46	1.21		mg/Kg	☼	83	20 - 144	13	30
2,4-Dinitrophenol	<0.75	*	2.92	2.27		mg/Kg	☼	78	10 - 110	15	30

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-121261-19 MSD

Matrix: Solid

Analysis Batch: 365896

Client Sample ID: 1314V3-11-B01 (0-1)

Prep Type: Total/NA

Prep Batch: 365830

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
2,4-Dinitrotoluene	<0.19		1.46	1.28		mg/Kg	☼	88	59 - 119	1	30
Acenaphthylene	<0.037		1.46	1.22		mg/Kg	☼	84	57 - 116	0	30
Acenaphthene	<0.037		1.46	1.16		mg/Kg	☼	80	52 - 113	1	30
4-Nitrophenol	<0.75		2.92	1.99		mg/Kg	☼	68	32 - 123	6	30
4-Nitroaniline	<0.37		1.46	1.52		mg/Kg	☼	104	55 - 146	3	30
4-Bromophenyl phenyl ether	<0.19		1.46	1.30		mg/Kg	☼	89	61 - 124	2	30
Bis(2-chloroethoxy)methane	<0.19		1.46	1.37		mg/Kg	☼	94	59 - 116	1	30
Bis(2-chloroethyl)ether	<0.19		1.46	0.880		mg/Kg	☼	60	53 - 116	2	30
4-Chlorophenyl phenyl ether	<0.19		1.46	1.30		mg/Kg	☼	89	61 - 111	0	30
4,6-Dinitro-2-methylphenol	<0.75		2.92	2.44		mg/Kg	☼	84	10 - 110	3	30
Anthracene	0.011	J	1.46	1.33		mg/Kg	☼	91	57 - 118	3	30
Dibenzofuran	<0.19		1.46	1.24		mg/Kg	☼	85	59 - 110	2	30
Carbazole	<0.19		1.46	1.59		mg/Kg	☼	109	65 - 137	2	30
Diethyl phthalate	<0.19		1.46	1.46		mg/Kg	☼	100	58 - 117	1	30
Dimethyl phthalate	<0.19		1.46	1.26		mg/Kg	☼	86	60 - 112	0	30
Di-n-butyl phthalate	<0.19		1.46	1.40		mg/Kg	☼	96	61 - 123	6	30
Butyl benzyl phthalate	<0.19		1.46	1.37		mg/Kg	☼	94	61 - 115	2	30
Fluoranthene	0.12		1.46	1.39		mg/Kg	☼	87	61 - 124	2	30
Benzo[a]anthracene	0.055		1.46	1.36		mg/Kg	☼	90	63 - 115	1	30
Fluorene	<0.037		1.46	1.30		mg/Kg	☼	89	56 - 115	0	30
Chrysene	0.062		1.46	1.30		mg/Kg	☼	85	63 - 118	1	30
Hexachlorobenzene	<0.075		1.46	1.30		mg/Kg	☼	89	62 - 126	3	30
3,3'-Dichlorobenzidine	<0.19	F1 F2	1.46	0.458	F1 F2	mg/Kg	☼	31	40 - 110	37	30
Hexachlorobutadiene	<0.19		1.46	1.01		mg/Kg	☼	70	56 - 120	1	30
Bis(2-ethylhexyl) phthalate	<0.19		1.46	1.46		mg/Kg	☼	100	62 - 117	2	30
Hexachlorocyclopentadiene	<0.75	F1	1.46	<0.73	F1	mg/Kg	☼	0	10 - 116	NC	30
Di-n-octyl phthalate	<0.19		1.46	1.45		mg/Kg	☼	100	58 - 129	1	30
Hexachloroethane	<0.19		1.46	1.03		mg/Kg	☼	70	54 - 111	4	30
Benzo[b]fluoranthene	0.11		1.46	1.51		mg/Kg	☼	96	61 - 123	3	30
Benzo[k]fluoranthene	0.039		1.46	1.51		mg/Kg	☼	101	59 - 125	3	30
Isophorone	<0.19		1.46	1.35		mg/Kg	☼	92	54 - 120	2	30
Benzo[a]pyrene	0.074		1.46	1.65		mg/Kg	☼	108	64 - 122	1	30
Naphthalene	<0.037		1.46	1.15		mg/Kg	☼	79	58 - 116	1	30
Indeno[1,2,3-cd]pyrene	0.039		1.46	1.02		mg/Kg	☼	67	50 - 149	11	30
Nitrobenzene	<0.037		1.46	1.41		mg/Kg	☼	97	56 - 121	0	30
Dibenz(a,h)anthracene	<0.037		1.46	1.02		mg/Kg	☼	70	61 - 134	10	30
Benzo[g,h,i]perylene	0.029	J	1.46	0.898		mg/Kg	☼	60	55 - 134	14	30
N-Nitrosodi-n-propylamine	<0.075		1.46	1.52		mg/Kg	☼	104	56 - 119	0	30
N-Nitrosodiphenylamine	<0.19		1.46	1.30		mg/Kg	☼	89	62 - 117	3	30
Pentachlorophenol	<0.75		2.92	1.00		mg/Kg	☼	34	12 - 116	22	30
Phenanthrene	0.053		1.46	1.34		mg/Kg	☼	88	58 - 125	1	30
Phenol	<0.19		1.46	1.59		mg/Kg	☼	109	55 - 118	0	30
Pyrene	0.10		1.46	1.34		mg/Kg	☼	84	60 - 115	1	30
3 & 4 Methylphenol	<0.19		1.46	1.44		mg/Kg	☼	99	55 - 124	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	96		40 - 130
Nitrobenzene-d5	90		33 - 124

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-121261-19 MSD**  
**Matrix: Solid**  
**Analysis Batch: 365896**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365830**

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	84		42 - 115
2,4,6-Tribromophenol	79		25 - 130
Phenol-d5	107		36 - 123
Terphenyl-d14	96		25 - 150

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-364935/1-A**  
**Matrix: Solid**  
**Analysis Batch: 365035**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364935**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.017		0.017	0.0059	mg/Kg		12/13/16 16:25	12/14/16 09:25	1
PCB-1221	<0.017		0.017	0.0073	mg/Kg		12/13/16 16:25	12/14/16 09:25	1
PCB-1232	<0.017		0.017	0.0073	mg/Kg		12/13/16 16:25	12/14/16 09:25	1
PCB-1242	<0.017		0.017	0.0055	mg/Kg		12/13/16 16:25	12/14/16 09:25	1
PCB-1248	<0.017		0.017	0.0066	mg/Kg		12/13/16 16:25	12/14/16 09:25	1
PCB-1254	<0.017		0.017	0.0036	mg/Kg		12/13/16 16:25	12/14/16 09:25	1
PCB-1260	<0.017		0.017	0.0082	mg/Kg		12/13/16 16:25	12/14/16 09:25	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	76		41 - 124	12/13/16 16:25	12/14/16 09:25	1
DCB Decachlorobiphenyl	96		47 - 127	12/13/16 16:25	12/14/16 09:25	1

**Lab Sample ID: LCS 500-364935/3-A**  
**Matrix: Solid**  
**Analysis Batch: 365035**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364935**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
PCB-1016	0.167	0.126		mg/Kg		76	60 - 118
PCB-1260	0.167	0.128		mg/Kg		77	66 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	74		41 - 124
DCB Decachlorobiphenyl	94		47 - 127

## Method: 6010B - Metals (ICP)

**Lab Sample ID: LCS 500-365114/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365431**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365114**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Cadmium	0.0500	0.0463		mg/L		93	80 - 120
Iron	1.00	1.05		mg/L		105	80 - 120
Lead	0.100	0.0940		mg/L		94	80 - 120
Manganese	0.500	0.495		mg/L		99	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-365114/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365431**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365114**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Nickel	0.500	0.472		mg/L		94	80 - 120

**Lab Sample ID: MB 500-365146/1-A**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.42	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Arsenic	<1.0		1.0	0.46	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Barium	<1.0		1.0	0.18	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Beryllium	<0.40		0.40	0.087	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Boron	<5.0		5.0	0.70	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Cadmium	<0.20		0.20	0.058	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Calcium	10.1	J	20	6.4	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Chromium	0.249	J	1.0	0.17	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Cobalt	<0.50		0.50	0.11	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Copper	<1.0		1.0	0.22	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Iron	<20		20	7.7	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Lead	<0.50		0.50	0.25	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Magnesium	<10		10	4.1	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Manganese	<1.0		1.0	0.20	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Nickel	<1.0		1.0	0.27	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Potassium	<50		50	8.2	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Selenium	<1.0		1.0	0.50	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Silver	<0.50		0.50	0.12	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Sodium	<100		100	13	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Thallium	<1.0		1.0	0.49	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Vanadium	<0.50		0.50	0.15	mg/Kg		12/14/16 15:50	12/16/16 20:54	1
Zinc	<2.0		2.0	0.63	mg/Kg		12/14/16 15:50	12/16/16 20:54	1

**Lab Sample ID: LCS 500-365146/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	46.0		mg/Kg		92	80 - 120
Arsenic	10.0	8.98		mg/Kg		90	80 - 120
Barium	200	189		mg/Kg		94	80 - 120
Beryllium	5.00	4.85		mg/Kg		97	80 - 120
Boron	100	89.5		mg/Kg		89	80 - 120
Cadmium	5.00	4.70		mg/Kg		94	80 - 120
Calcium	1000	996		mg/Kg		100	80 - 120
Chromium	20.0	19.7		mg/Kg		99	80 - 120
Cobalt	50.0	47.2		mg/Kg		94	80 - 120
Copper	25.0	23.9		mg/Kg		96	80 - 120
Iron	100	102		mg/Kg		102	80 - 120
Lead	10.0	9.66		mg/Kg		97	80 - 120
Magnesium	1000	951		mg/Kg		95	80 - 120
Manganese	50.0	51.5		mg/Kg		103	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-365146/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Potassium	1000	1010		mg/Kg		101	80 - 120
Selenium	10.0	8.58		mg/Kg		86	80 - 120
Silver	5.00	4.66		mg/Kg		93	80 - 120
Sodium	1000	956		mg/Kg		96	80 - 120
Thallium	10.0	9.15		mg/Kg		91	80 - 120
Vanadium	50.0	50.0		mg/Kg		100	80 - 120
Zinc	50.0	47.1		mg/Kg		94	80 - 120

**Lab Sample ID: 500-121261-19 MS**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<1.1	F1	27.4	6.62	F1	mg/Kg	☼	24	75 - 125
Arsenic	3.9		5.48	8.62		mg/Kg	☼	86	75 - 125
Barium	81		110	193		mg/Kg	☼	102	75 - 125
Beryllium	0.49		2.74	2.95		mg/Kg	☼	90	75 - 125
Boron	3.3	F1	54.8	43.9	F1	mg/Kg	☼	74	75 - 125
Cadmium	0.23		2.74	2.44		mg/Kg	☼	81	75 - 125
Calcium	8900	B	548	9910	4	mg/Kg	☼	181	75 - 125
Chromium	13	B	11.0	26.2		mg/Kg	☼	122	75 - 125
Cobalt	4.8		27.4	27.8		mg/Kg	☼	84	75 - 125
Copper	12		13.7	26.1		mg/Kg	☼	99	75 - 125
Iron	12000		54.8	14000	4	mg/Kg	☼	3571	75 - 125
Lead	26	F2	5.48	31.2	4	mg/Kg	☼	90	75 - 125
Magnesium	2800		548	3750	4	mg/Kg	☼	169	75 - 125
Manganese	410		27.4	540	4	mg/Kg	☼	482	75 - 125
Nickel	11		27.4	36.2		mg/Kg	☼	90	75 - 125
Selenium	0.28	J F1	5.48	4.33	F1	mg/Kg	☼	74	75 - 125
Silver	<0.27		2.74	2.39		mg/Kg	☼	87	75 - 125
Sodium	290		548	893		mg/Kg	☼	110	75 - 125
Thallium	0.66		5.48	5.56		mg/Kg	☼	89	75 - 125
Vanadium	20		27.4	51.0		mg/Kg	☼	112	75 - 125
Zinc	45	F1	27.4	75.3		mg/Kg	☼	109	75 - 125

**Lab Sample ID: 500-121261-19 MS**  
**Matrix: Solid**  
**Analysis Batch: 365688**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Potassium	570		548	1210		mg/Kg	☼	116	75 - 125

**Lab Sample ID: 500-121261-19 MSD**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<1.1	F1	27.7	6.32	F1	mg/Kg	☼	23	75 - 125	5	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-121261-19 MSD**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Arsenic	3.9		5.53	8.85		mg/Kg	☼	89	75 - 125	3	20	
Barium	81		111	188		mg/Kg	☼	97	75 - 125	2	20	
Beryllium	0.49		2.77	2.99		mg/Kg	☼	90	75 - 125	1	20	
Boron	3.3	F1	55.3	44.8		mg/Kg	☼	75	75 - 125	2	20	
Cadmium	0.23		2.77	2.54		mg/Kg	☼	83	75 - 125	4	20	
Calcium	8900	B	553	10200	4	mg/Kg	☼	230	75 - 125	3	20	
Chromium	13	B	11.1	25.8		mg/Kg	☼	117	75 - 125	2	20	
Cobalt	4.8		27.7	28.1		mg/Kg	☼	84	75 - 125	1	20	
Copper	12		13.8	27.6		mg/Kg	☼	109	75 - 125	6	20	
Iron	12000		55.3	13900	4	mg/Kg	☼	3349	75 - 125	1	20	
Lead	26	F2	5.53	40.3	4 F2	mg/Kg	☼	254	75 - 125	26	20	
Magnesium	2800		553	3780	4	mg/Kg	☼	172	75 - 125	1	20	
Manganese	410		27.7	514	4	mg/Kg	☼	380	75 - 125	5	20	
Nickel	11		27.7	36.3		mg/Kg	☼	90	75 - 125	0	20	
Selenium	0.28	J F1	5.53	4.39	F1	mg/Kg	☼	74	75 - 125	1	20	
Silver	<0.27		2.77	2.45		mg/Kg	☼	88	75 - 125	2	20	
Sodium	290		553	881		mg/Kg	☼	106	75 - 125	1	20	
Thallium	0.66		5.53	5.61		mg/Kg	☼	89	75 - 125	1	20	
Vanadium	20		27.7	50.8		mg/Kg	☼	111	75 - 125	0	20	
Zinc	45	F1	27.7	81.6	F1	mg/Kg	☼	131	75 - 125	8	20	

**Lab Sample ID: 500-121261-19 MSD**  
**Matrix: Solid**  
**Analysis Batch: 365688**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Potassium	570		553	1210		mg/Kg	☼	116	75 - 125	1	20	

**Lab Sample ID: 500-121261-19 DU**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			Result	Qualifier				
Antimony	<1.1	F1	0.335	J	mg/Kg	☼	NC	20
Arsenic	3.9		4.01		mg/Kg	☼	3	20
Barium	81		86.6		mg/Kg	☼	7	20
Beryllium	0.49		0.536		mg/Kg	☼	8	20
Boron	3.3	F1	3.57		mg/Kg	☼	9	20
Cadmium	0.23		0.239		mg/Kg	☼	3	20
Calcium	8900	B	8880		mg/Kg	☼	0.4	20
Chromium	13	B	13.8		mg/Kg	☼	7	20
Cobalt	4.8		5.60		mg/Kg	☼	15	20
Copper	12		12.7		mg/Kg	☼	2	20
Iron	12000		16200	F3	mg/Kg	☼	29	20
Lead	26	F2	38.8	F3	mg/Kg	☼	39	20
Magnesium	2800		2860		mg/Kg	☼	1	20
Manganese	410		520	F3	mg/Kg	☼	24	20
Nickel	11		11.8		mg/Kg	☼	3	20
Selenium	0.28	J F1	0.376	J F5	mg/Kg	☼	31	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-121261-19 DU**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Silver	<0.27		<0.28		mg/Kg	☼	NC	20
Sodium	290		299		mg/Kg	☼	2	20
Thallium	0.66		0.903	F5	mg/Kg	☼	31	20
Vanadium	20		21.8		mg/Kg	☼	8	20
Zinc	45	F1	49.4		mg/Kg	☼	9	20

**Lab Sample ID: 500-121261-19 DU**  
**Matrix: Solid**  
**Analysis Batch: 365688**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: Total/NA**  
**Prep Batch: 365146**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Potassium	570		581		mg/Kg	☼	2	20

**Lab Sample ID: LCS 500-365242/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365435**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365242**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Barium	0.500	0.480	J	mg/L		96	80 - 120	
Beryllium	0.0500	0.0476		mg/L		95	80 - 120	
Boron	1.00	0.881		mg/L		88	80 - 120	
Cadmium	0.0500	0.0465		mg/L		93	80 - 120	
Chromium	0.200	0.191		mg/L		95	80 - 120	
Cobalt	0.500	0.479		mg/L		96	80 - 120	
Iron	1.00	0.972		mg/L		97	80 - 120	
Lead	0.100	0.0928		mg/L		93	80 - 120	
Manganese	0.500	0.469		mg/L		94	80 - 120	
Nickel	0.500	0.480		mg/L		96	80 - 120	
Selenium	0.100	0.0903		mg/L		90	80 - 120	
Silver	0.0500	0.0460		mg/L		92	80 - 120	
Zinc	0.500	0.476	J	mg/L		95	80 - 120	

**Lab Sample ID: LCS 500-365718/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365876**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365718**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Lead	0.100	0.0976		mg/L		98	80 - 120	

**Lab Sample ID: LB 500-365091/1-B**  
**Matrix: Solid**  
**Analysis Batch: 365435**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 365242**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/15/16 08:57	12/15/16 23:26	1
Boron	<0.50		0.50	0.050	mg/L		12/15/16 08:57	12/15/16 23:26	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/15/16 08:57	12/15/16 23:26	1
Chromium	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:26	1

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-365091/1-B**  
**Matrix: Solid**  
**Analysis Batch: 365435**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 365242**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cobalt	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:26	1
Iron	<0.40		0.40	0.20	mg/L		12/15/16 08:57	12/15/16 23:26	1
Lead	0.0471		0.0075	0.0075	mg/L		12/15/16 08:57	12/15/16 23:26	1
Manganese	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:26	1
Nickel	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:26	1
Selenium	<0.050		0.050	0.020	mg/L		12/15/16 08:57	12/15/16 23:26	1
Silver	<0.025		0.025	0.010	mg/L		12/15/16 08:57	12/15/16 23:26	1
Zinc	<0.50		0.50	0.020	mg/L		12/15/16 08:57	12/15/16 23:26	1

**Lab Sample ID: 500-121261-19 MS**  
**Matrix: Solid**  
**Analysis Batch: 365435**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: TCLP**  
**Prep Batch: 365242**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Barium	0.78		0.500	1.34		mg/L		112	50 - 150
Beryllium	<0.0040		0.0500	0.0496		mg/L		99	50 - 150
Boron	0.074	J	1.00	1.00		mg/L		93	50 - 150
Cadmium	0.0021	J	0.0500	0.0560		mg/L		108	50 - 150
Chromium	<0.025		0.200	0.192		mg/L		96	50 - 150
Cobalt	<0.025		0.500	0.529		mg/L		106	50 - 150
Iron	<0.40		1.00	1.01		mg/L		101	50 - 150
Manganese	0.90		0.500	1.42		mg/L		104	50 - 150
Nickel	<0.025		0.500	0.523		mg/L		105	50 - 150
Selenium	<0.050		0.100	0.125		mg/L		125	50 - 150
Silver	<0.025		0.0500	0.0547		mg/L		109	50 - 150
Zinc	0.048	J	0.500	0.596		mg/L		110	50 - 150

**Lab Sample ID: 500-121261-19 DU**  
**Matrix: Solid**  
**Analysis Batch: 365435**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: TCLP**  
**Prep Batch: 365242**

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	
			Result	Qualifier			RPD	Limit
Barium	0.78		0.922		mg/L		16	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.074	J	0.0702	J	mg/L		5	20
Cadmium	0.0021	J	0.00319	J F5	mg/L		40	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
Manganese	0.90		1.06		mg/L		16	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	0.048	J	0.0587	J F5	mg/L		21	20

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-365637/1-B**  
**Matrix: Solid**  
**Analysis Batch: 365876**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 365718**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/19/16 08:53	12/19/16 17:06	1

**Lab Sample ID: 500-121261-13 MS**  
**Matrix: Solid**  
**Analysis Batch: 365876**

**Client Sample ID: 1314V3-06-B01 (0-8)**  
**Prep Type: TCLP**  
**Prep Batch: 365718**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	<0.0075		0.100	0.0975		mg/L		97	50 - 150

**Lab Sample ID: 500-121261-13 DU**  
**Matrix: Solid**  
**Analysis Batch: 365876**

**Client Sample ID: 1314V3-06-B01 (0-8)**  
**Prep Type: TCLP**  
**Prep Batch: 365718**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lead	<0.0075		<0.0075		mg/L		NC	20

**Lab Sample ID: LB 500-364903/1-B**  
**Matrix: Solid**  
**Analysis Batch: 365431**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 365114**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/14/16 14:09	12/16/16 04:45	1
Iron	<0.20		0.20	0.20	mg/L		12/14/16 14:09	12/16/16 04:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/14/16 14:09	12/16/16 04:45	1
Manganese	<0.025		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 04:45	1
Nickel	<0.025		0.025	0.010	mg/L		12/14/16 14:09	12/16/16 04:45	1

**Lab Sample ID: 500-121261-19 MS**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: SPLP East**  
**Prep Batch: 365114**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Manganese	0.38		0.500	0.968		mg/L		118	50 - 150

**Lab Sample ID: 500-121261-19 DU**  
**Matrix: Solid**  
**Analysis Batch: 365635**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: SPLP East**  
**Prep Batch: 365114**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.38		0.351		mg/L		7	20

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: LCS 500-365242/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365446**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365242**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.456		mg/L		91	80 - 120

TestAmerica Chicago



# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 500-365242/2-A**  
**Matrix: Solid**  
**Analysis Batch: 365446**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365242**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Thallium	0.100	0.0985		mg/L		98	80 - 120

**Lab Sample ID: MB 500-364441/1-A**  
**Matrix: Water**  
**Analysis Batch: 364838**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 364441**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010	0.00044	mg/L		12/09/16 14:56	12/12/16 16:52	1
Barium	<0.0025		0.0025	0.00084	mg/L		12/09/16 14:56	12/12/16 16:52	1
Boron	<0.050		0.050	0.025	mg/L		12/09/16 14:56	12/12/16 16:52	1
Cadmium	<0.00050		0.00050	0.00019	mg/L		12/09/16 14:56	12/12/16 16:52	1
Calcium	<0.20		0.20	0.11	mg/L		12/09/16 14:56	12/12/16 16:52	1
Chromium	<0.0050		0.0050	0.00061	mg/L		12/09/16 14:56	12/12/16 16:52	1
Cobalt	<0.0010		0.0010	0.00019	mg/L		12/09/16 14:56	12/12/16 16:52	1
Copper	<0.0020		0.0020	0.00096	mg/L		12/09/16 14:56	12/12/16 16:52	1
Iron	0.113		0.10	0.026	mg/L		12/09/16 14:56	12/12/16 16:52	1
Lead	<0.00050		0.00050	0.00014	mg/L		12/09/16 14:56	12/12/16 16:52	1
Magnesium	<0.20		0.20	0.083	mg/L		12/09/16 14:56	12/12/16 16:52	1
Manganese	<0.0025		0.0025	0.00099	mg/L		12/09/16 14:56	12/12/16 16:52	1
Nickel	<0.0020		0.0020	0.00053	mg/L		12/09/16 14:56	12/12/16 16:52	1
Potassium	<0.50		0.50	0.19	mg/L		12/09/16 14:56	12/12/16 16:52	1
Selenium	<0.0025		0.0025	0.00083	mg/L		12/09/16 14:56	12/12/16 16:52	1
Silver	<0.00050		0.00050	0.000080	mg/L		12/09/16 14:56	12/12/16 16:52	1
Sodium	<0.20		0.20	0.088	mg/L		12/09/16 14:56	12/12/16 16:52	1
Thallium	<0.0020		0.0020	0.00059	mg/L		12/09/16 14:56	12/12/16 16:52	1
Vanadium	<0.0050		0.0050	0.0022	mg/L		12/09/16 14:56	12/12/16 16:52	1
Zinc	0.00954	J	0.020	0.0046	mg/L		12/09/16 14:56	12/12/16 16:52	1

**Lab Sample ID: LCS 500-364441/2-A**  
**Matrix: Water**  
**Analysis Batch: 364838**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 364441**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0990		mg/L		99	80 - 120
Barium	0.500	0.494		mg/L		99	80 - 120
Boron	1.00	0.943		mg/L		94	80 - 120
Cadmium	0.0500	0.0501		mg/L		100	80 - 120
Calcium	10.0	11.3		mg/L		113	80 - 120
Chromium	0.200	0.197		mg/L		99	80 - 120
Cobalt	0.500	0.486		mg/L		97	80 - 120
Copper	0.250	0.254		mg/L		102	80 - 120
Iron	1.00	0.995		mg/L		99	80 - 120
Lead	0.100	0.0973		mg/L		97	80 - 120
Magnesium	10.0	9.76		mg/L		98	80 - 120
Manganese	0.500	0.494		mg/L		99	80 - 120
Nickel	0.500	0.498		mg/L		100	80 - 120
Potassium	10.0	9.83		mg/L		98	80 - 120
Selenium	0.100	0.0993		mg/L		99	80 - 120
Silver	0.0500	0.0515		mg/L		103	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 500-364441/2-A**  
**Matrix: Water**  
**Analysis Batch: 364838**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 364441**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	9.68		mg/L		97	80 - 120
Thallium	0.100	0.0967		mg/L		97	80 - 120
Vanadium	0.500	0.482		mg/L		96	80 - 120
Zinc	0.500	0.508		mg/L		102	80 - 120

**Lab Sample ID: LB 500-365091/1-B**  
**Matrix: Solid**  
**Analysis Batch: 365446**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 365242**

Analyte	LB Result	LB 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 17:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/15/16 08:57	12/15/16 17:56	1

**Lab Sample ID: 500-121261-19 MS**  
**Matrix: Solid**  
**Analysis Batch: 365446**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: TCLP**  
**Prep Batch: 365242**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0060		0.500	0.461		mg/L		92	50 - 150
Thallium	<0.0020		0.100	0.0985		mg/L		99	50 - 150

**Lab Sample ID: 500-121261-19 DU**  
**Matrix: Solid**  
**Analysis Batch: 365446**

**Client Sample ID: 1314V3-11-B01 (0-1)**  
**Prep Type: TCLP**  
**Prep Batch: 365242**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

## Method: 7470A - Mercury

**Lab Sample ID: MB 500-364700/12-A**  
**Matrix: Water**  
**Analysis Batch: 364926**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 364700**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		12/12/16 14:00	12/13/16 13:18	1

**Lab Sample ID: LCS 500-364700/13-A**  
**Matrix: Water**  
**Analysis Batch: 364926**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 364700**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00207		mg/L		104	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 7470A - TCLP Mercury

**Lab Sample ID: MB 500-365288/12-A**  
**Matrix: Solid**  
**Analysis Batch: 365486**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 365288**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/15/16 13:00	12/16/16 10:33	1

**Lab Sample ID: LCS 500-365288/13-A**  
**Matrix: Solid**  
**Analysis Batch: 365486**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365288**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00211		mg/L		106	80 - 120

**Lab Sample ID: LB 500-365091/1-C**  
**Matrix: Solid**  
**Analysis Batch: 365486**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 365288**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/15/16 13:00	12/16/16 10:39	1

**Lab Sample ID: 500-121261-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 365486**

**Client Sample ID: 1314V3-01-B36 (0-8)**  
**Prep Type: TCLP**  
**Prep Batch: 365288**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000655		mg/L		65	50 - 150

**Lab Sample ID: 500-121261-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 365486**

**Client Sample ID: 1314V3-01-B36 (0-8)**  
**Prep Type: TCLP**  
**Prep Batch: 365288**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-365139/12-A**  
**Matrix: Solid**  
**Analysis Batch: 365298**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 365139**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0117	J	0.017	0.0088	mg/Kg		12/14/16 16:00	12/15/16 11:55	1

**Lab Sample ID: LCS 500-365139/13-A**  
**Matrix: Solid**  
**Analysis Batch: 365298**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 365139**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.169		mg/Kg		101	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Ecology and Environment, Inc.  
 Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

## Method: 7471B - Mercury (CVAA) (Continued)

**Lab Sample ID: 500-121261-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 365298**

**Client Sample ID: 1314V3-01-B36 (0-8)**  
**Prep Type: Total/NA**  
**Prep Batch: 365139**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.038	B	0.0818	0.129		mg/Kg	☼	111	75 - 125

**Lab Sample ID: 500-121261-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 365298**

**Client Sample ID: 1314V3-01-B36 (0-8)**  
**Prep Type: Total/NA**  
**Prep Batch: 365139**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.038	B	0.0934	0.137		mg/Kg	☼	106	75 - 125	6	20

**Lab Sample ID: 500-121261-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 365298**

**Client Sample ID: 1314V3-01-B36 (0-8)**  
**Prep Type: Total/NA**  
**Prep Batch: 365139**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.038	B	0.0453		mg/Kg	☼	17	20

## Method: 9045D - pH

**Lab Sample ID: 500-121261-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 365174**

**Client Sample ID: 1314V3-01-B36 (0-8)**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	8.4		8.4		SU		0.4	

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (0-8)**

**Lab Sample ID: 500-121261-1**

**Date Collected: 12/08/16 14:30**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 04:59	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/15/16 23:35	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:06	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:41	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 15:25		
					(End)	12/14/16 15:27		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B36 (0-8)**

**Lab Sample ID: 500-121261-1**

**Date Collected: 12/08/16 14:30**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 12:48	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 12:43	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:07	KML	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:00	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

**Date Collected: 12/08/16 14:35**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 05:06	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/15/16 23:39	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

**Date Collected: 12/08/16 14:35**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6010B		1	365876	12/19/16 22:10	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:11	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:46	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		BJJ	TAL CHI
					(Start)	12/14/16 15:30		
					(End)	12/14/16 15:33		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B36 (8-16)**

**Lab Sample ID: 500-121261-2**

**Date Collected: 12/08/16 14:35**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 13:13	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 13:09	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:14	KML	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:14	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B36 (16-24)**

**Lab Sample ID: 500-121261-3**

**Date Collected: 12/08/16 14:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 05:13	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/15/16 23:44	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:15	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:48	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (16-24)**

**Lab Sample ID: 500-121261-3**

**Date Collected: 12/08/16 14:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	365174	12/14/16 15:33 (Start) 12/14/16 15:36 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-01-B36 (16-24)**

**Lab Sample ID: 500-121261-3**

**Date Collected: 12/08/16 14:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 87.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 13:38	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 13:34	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:21	KML	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 13:12	MJD	TAL CHI

**Client Sample ID: 1314V3-01-B36 (24-28)**

**Lab Sample ID: 500-121261-4**

**Date Collected: 12/08/16 15:10**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365635	12/16/16 18:21	KML	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/15/16 23:49	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:20	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:49	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174	12/14/16 15:36 (Start) 12/14/16 15:39 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-01-B36 (24-28)**

**Lab Sample ID: 500-121261-4**

**Date Collected: 12/08/16 15:10**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 84.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364610	12/12/16 15:31	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 13:59	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:28	KML	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:19	MJD	TAL CHI

**Client Sample ID: 1314V3-02-B01 (0-5)**

**Lab Sample ID: 500-121261-5**

**Date Collected: 12/08/16 08:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/15/16 23:54	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:25	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:51	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 15:39		
					(End)	12/14/16 15:42		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-02-B01 (0-5)**

**Lab Sample ID: 500-121261-5**

**Date Collected: 12/08/16 08:40**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 68.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/08/16 08:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364610	12/12/16 15:56	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 14:24	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:34	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		10	365688	12/18/16 20:31	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:21	MJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B01 (5-10)**

**Lab Sample ID: 500-121261-6**

**Date Collected: 12/08/16 08:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 05:33	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/15/16 23:59	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 22:14	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:29	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:52	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 15:42		
					(End)	12/14/16 15:45		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-02-B01 (5-10)**

**Lab Sample ID: 500-121261-6**

**Date Collected: 12/08/16 08:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 82.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 14:52	DJD	TAL CHI
Total/NA	Prep	3541	DL		365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D	DL	5	366210	12/22/16 02:06	GES	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 21:06	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:41	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		10	365688	12/18/16 20:35	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:23	MJD	TAL CHI

**Client Sample ID: 1314V3-02-G01**

**Lab Sample ID: 500-121261-7**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	365402	12/16/16 17:37	TCT	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-G01**

**Lab Sample ID: 500-121261-7**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			364764	12/12/16 21:45	LLH	TAL CHI
Total/NA	Analysis	8270D		1	365383	12/16/16 05:20	GES	TAL CHI
Total Recoverable	Prep	3005A			364441	12/09/16 14:56	JNH	TAL CHI
Total Recoverable	Analysis	6020A		1	364838	12/12/16 17:30	PFK	TAL CHI
Total Recoverable	Prep	3005A			364441	12/09/16 14:56	JNH	TAL CHI
Total Recoverable	Analysis	6020A		1	365454	12/15/16 19:40	FXG	TAL CHI
Total/NA	Prep	7470A			364700	12/12/16 14:00	MJD	TAL CHI
Total/NA	Analysis	7470A		1	364926	12/13/16 13:39	MJD	TAL CHI

**Client Sample ID: 1314V3-02-G01D**

**Lab Sample ID: 500-121261-8**

**Date Collected: 12/08/16 09:15**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	365839	12/20/16 01:27	TCT	TAL CHI
Total/NA	Prep	3510C			364764	12/12/16 21:45	LLH	TAL CHI
Total/NA	Analysis	8270D		1	365383	12/16/16 05:45	GES	TAL CHI
Total Recoverable	Prep	3005A			364441	12/09/16 14:56	JNH	TAL CHI
Total Recoverable	Analysis	6020A		1	364838	12/12/16 17:33	PFK	TAL CHI
Total Recoverable	Prep	3005A			364441	12/09/16 14:56	JNH	TAL CHI
Total Recoverable	Analysis	6020A		1	365454	12/15/16 19:44	FXG	TAL CHI
Total/NA	Prep	7470A			364700	12/12/16 14:00	MJD	TAL CHI
Total/NA	Analysis	7470A		1	364926	12/13/16 13:41	MJD	TAL CHI

**Client Sample ID: 1314V3-00-TB03**

**Lab Sample ID: 500-121261-9**

**Date Collected: 12/08/16 00:00**

**Matrix: Water**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	365402	12/16/16 18:29	TCT	TAL CHI

**Client Sample ID: 1314V3-02-B02 (0-6)**

**Lab Sample ID: 500-121261-10**

**Date Collected: 12/08/16 10:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 05:40	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:04	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (0-6)**

**Lab Sample ID: 500-121261-10**

**Date Collected: 12/08/16 10:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:34	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:57	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174	(Start) 12/14/16 15:45 (End) 12/14/16 15:48	JB	TAL CHI
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-02-B02 (0-6)**

**Lab Sample ID: 500-121261-10**

**Date Collected: 12/08/16 10:45**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 88.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 15:17	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 14:49	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:48	KML	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:26	MJD	TAL CHI

**Client Sample ID: 1314V3-02-B02 (6-12)**

**Lab Sample ID: 500-121261-11**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:02	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:17	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 22:19	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:39	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:58	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)**

**Lab Sample ID: 500-121261-11**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	365174	12/14/16 15:48 (Start) 12/14/16 15:51 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-02-B02 (6-12)**

**Lab Sample ID: 500-121261-11**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 83.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 15:42	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 15:14	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 21:55	KML	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:28	MJD	TAL CHI

**Client Sample ID: 1314V3-02-B02 (6-12)D**

**Lab Sample ID: 500-121261-12**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:09	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:21	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:53	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 10:59	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174	12/14/16 15:51 (Start) 12/14/16 15:54 (End)	JBJ	TAL CHI
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-02-B02 (6-12)D**

**Lab Sample ID: 500-121261-12**

**Date Collected: 12/08/16 10:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 82.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 16:07	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 15:39	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 22:17	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365688	12/18/16 20:39	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:30	MJD	TAL CHI

**Client Sample ID: 1314V3-06-B01 (0-8)**

**Lab Sample ID: 500-121261-13**

**Date Collected: 12/08/16 11:20**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:16	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:26	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 22:24	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 18:57	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 11:01	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 15:54		
					(End)	12/14/16 15:57		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-06-B01 (0-8)**

**Lab Sample ID: 500-121261-13**

**Date Collected: 12/08/16 11:20**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/08/16 11:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364836	12/13/16 13:47	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B01 (0-8)**

**Lab Sample ID: 500-121261-13**

**Date Collected: 12/08/16 11:20**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 86.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	365896	12/20/16 19:00	AJD	TAL CHI
Total/NA	Prep	3541			364935	12/13/16 16:25	JP1	TAL CHI
Total/NA	Analysis	8082A		1	365035	12/14/16 15:03	BJH	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		5	365635	12/16/16 22:24	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		5	365688	12/18/16 20:43	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:37	MJD	TAL CHI

**Client Sample ID: 1314V3-06-B02 (0-8)**

**Lab Sample ID: 500-121261-14**

**Date Collected: 12/08/16 11:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:23	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:31	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 22:50	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 19:02	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 11:02	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 15:57		
					(End)	12/14/16 16:00		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**Client Sample ID: 1314V3-06-B02 (0-8)**

**Lab Sample ID: 500-121261-14**

**Date Collected: 12/08/16 11:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 16:57	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 19:25	AJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**Client Sample ID: 1314V3-06-B02 (0-8)**

**Lab Sample ID: 500-121261-14**

**Date Collected: 12/08/16 11:50**

**Matrix: Solid**

**Date Received: 12/09/16 10:00**

**Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		5	365635	12/16/16 22:31	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		5	365688	12/18/16 20:48	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:39	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:29	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:36	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 22:55	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 19:07	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 11:04	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 16:00		
					(End)	12/14/16 16:03		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 17:22	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 16:04	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 22:38	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	365688	12/18/16 20:52	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:42	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:36	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:41	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 23:00	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 19:11	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 11:05	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 16:03		
					(End)	12/14/16 16:06		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 17:47	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 19:51	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 22:44	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365688	12/18/16 20:56	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:44	MJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:43	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:46	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 23:05	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 19:16	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 11:07	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 16:06		
					(End)	12/14/16 16:09		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 18:12	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 20:16	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 22:51	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365688	12/18/16 21:08	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:46	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365431	12/16/16 06:50	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:50	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 23:10	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 19:30	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 11:08	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JBK	TAL CHI
					(Start)	12/14/16 16:09		
					(End)	12/14/16 16:12		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 18:36	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 20:41	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 22:58	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365688	12/18/16 21:13	PJ1	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		10	365688	12/18/16 21:18	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:49	MJD	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			364903	12/13/16 14:44	RMP	TAL CHI
SPLP East	Prep	3010A			365114	12/14/16 14:09	JNH	TAL CHI
SPLP East	Analysis	6010B		1	365635	12/16/16 18:27	KML	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Ecology and Environment, Inc.  
Project/Site: IDOT - I-74 - WO 046

TestAmerica Job ID: 500-121261-1

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6010B		1	365435	12/16/16 00:55	PJ1	TAL CHI
TCLP	Leach	1311			365637	12/18/16 12:00	MJD	TAL CHI
TCLP	Prep	3010A			365718	12/19/16 08:53	JEF	TAL CHI
TCLP	Analysis	6010B		1	365876	12/19/16 23:15	PJ1	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	3010A			365242	12/15/16 08:57	JEF	TAL CHI
TCLP	Analysis	6020A		1	365446	12/15/16 19:35	FXG	TAL CHI
TCLP	Leach	1311			365091	12/14/16 12:08	RMP	TAL CHI
TCLP	Prep	7470A			365288	12/15/16 13:00	MJD	TAL CHI
TCLP	Analysis	7470A		1	365486	12/16/16 11:10	MJD	TAL CHI
Total/NA	Analysis	9045D		1	365174		JB	TAL CHI
					(Start)	12/14/16 16:12		
					(End)	12/14/16 16:15		
Total/NA	Analysis	Moisture		1	364872	12/13/16 12:36	LWN	TAL CHI

**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**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364545	12/11/16 19:01	DJD	TAL CHI
Total/NA	Prep	5035			364544	12/09/16 17:53	WRE	TAL CHI
Total/NA	Analysis	8260B		1	364610	12/12/16 16:47	DJD	TAL CHI
Total/NA	Prep	3541			365830	12/19/16 16:12	DAK	TAL CHI
Total/NA	Analysis	8270D		1	365896	12/20/16 16:30	AJD	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365635	12/16/16 23:05	KML	TAL CHI
Total/NA	Prep	3050B			365146	12/14/16 15:50	JNH	TAL CHI
Total/NA	Analysis	6010B		1	365688	12/18/16 21:22	PJ1	TAL CHI
Total/NA	Prep	7471B			365139	12/14/16 16:00	MJD	TAL CHI
Total/NA	Analysis	7471B		1	365298	12/15/16 12:51	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: 500-121261-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B		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

2417 Bond Street, University Park, IL 60  
Phone: 708.534.5200 Fax: 708.534.5201



500-121261 COC

Report To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-121261  
Chain of Custody Number: EE46-3c  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: 3.6/3.8

Client		Client Project #		Preservative		Parameter										Preservative Key		
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM								1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix											Comments	
			Date	Time														
1		1314V3-01-B36(0-8)	12-8-16	1430	2	S	X	X	X	X	X							C4/E26
2		1314V3-01-B36(8-16)	12-8-16	1435	2	S	X	X	X	X	X							
3		1314V3-01-B36(16-24)	12-8-16	1440	2	S	X	X	X	X	X							
4		1314V3-01-B36(24-28)	12-8-16	1510	2	S	X	X	X	X	X							
12-8-16																		

Turnaround Time Required (Business Days) \_\_\_\_\_  
 Requested Due Date \_\_\_\_\_  
 Sample Disposal:  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>EE</u> Date: <u>12-8-16</u> Time: <u>1700</u>	Received By: <u>[Signature]</u> Company: <u>TH-OHL</u> Date: <u>12/9/16</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 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

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: E846-26  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: \_\_\_\_\_

Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Preservative					Comments	
			Date	Time									
5		1314V3-02-T301(0-5)	12-8-16	0840	2 S	W	X	X	X	X	X	64608	
6		1314V3-02-B01(5-10)	12-8-16	0845	2 S	W	X	X	X	X			
7		1314V3-02-601	12-8-16	0915	6 W	W	X	X	X				
8		1314V3-02-601D	12-8-16	0915	6 W	W	X	X	X				
9		1314V3-00-TB03	-	-	2 W	W	X						
10		1314V3-02-B02(0-6)	12-8-16	1045	2 S	W							
11		1314V3-02-B02(6-12)	12-8-16	1050	2 S	W							
12		1314V3-02-B02(6-12)	12-8-16	1050	2 S	W							
							12-8-16						

- Preservative Key
1. HCL, Cool to 4°
  2. H2SO4, Cool to 4°
  3. HNO3, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO4
  7. Cool to 4°
  8. None
  9. Other

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days  10 Days 15 Days Other

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 <i>[Signature]</i>	Company EE	Date 12-8-16	Time 1700	Received By <i>[Signature]</i>	Company TA-CHI	Date 12/9/16	Time 1800
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

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 #: 500-12/26/16  
 Chain of Custody Number: ED16-29  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter						Preservative Key		
Project Name		Lab Project #		Matrix		Comments								
Project Location/State		Lab Project #		Matrix		Comments								
Sampler		Lab PM		Matrix		Comments								
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix							Comments	
EE		1009008-0046-01												
+74		52012744												
Port Island County, IL		D Wright												
S. Cooper														
13		1314V3-06-B01 (0-8)	12-8-16	1120	2 S	Soc	X	X	X	X	X	X	64 CO8	
14		1314V3-06-B02 (0-4)	12-8-16	1150	2 S	Soc	X	X	X	X	X	X		
15		1314V3-06-B03 (0-4)	12-8-16	1220	2 S	Soc	X	X	X	X	X	X		
<del>12-8-16</del>														

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>12-8-16</u>	Time: <u>1100</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CPI</u>	Date: <u>12/9/16</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: 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

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: E896-31

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative							Preservative Key		
Project Name		Lab Project #		Parameter							Comments		
Project Location/State		Lab PM											
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix							
			Date	Time									
EE		1009008-0046-01											
I74													
Rock Island County, IL		50012744											
S. Cooper		D Wright											
16		1314V3-11-B03(0-1)	12-8-16	1615	2	S	VOL	SVOL	Total TAZ	metals	TCUP/SPR	TAZ metals	PT / 4% Solids
							X	X	X	X	X		
17		1314V3-11-B03(0-1)	12-8-16	1615	2	S	X	X	X	X	X		
							X	X	X	X	X		
18		1314V3-11-B02(0-1)	12-8-16	1635	2	S	X	X	X	X	X		
							X	X	X	X	X		
19		1314V3-11-B01(0-1)	12-8-16	1655	2	S	X	X	X	X	X		
							X	X	X	X	X		
<p><i>S</i> 12-8-16</p>													

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>12-8-16</u>	Time: <u>1700</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CHE</u>	Date: <u>12/9/16</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 - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments: \_\_\_\_\_

Lab Comments: \_\_\_\_\_



## Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-121261-1

**Login Number: 121261**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6,3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: South

Time: 1607

Description: Orange cone and placard indicate location of boring 1314V3-01-B12



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: South

Time: 1625

Description: Orange cone and placard indicate location of boring 1314V3-01-B13



# PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: South

Time: 1554

Description: Orange cone and placard indicate location of boring 1314V3-01-B14



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: South

Time: 1504

Description: Orange cone and placard indicate location of boring 1314V3-01-B15



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16  
Direction: South  
Time: 1431

Description: Orange cone and placard indicate location of boring 1314V3-01-B16



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16  
Direction: South  
Time: 1408

Description: Orange cone and placard indicate location of boring 1314V3-01-B17



## PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: South

Time: 1344

Description: Orange cone and placard indicate location of boring 1314V3-01-B18



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: South

Time: 1329

Description: Orange cone and placard indicate location of boring 1314V3-01-B19



## PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/1/16

Direction: North

Time: 1651

Description: Orange cone and placard indicate location of boring 1314V3-01-B20



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16

Direction: North

Time: 1102

Description: Orange cone and placard indicate location of boring 1314V3-01-B21



# PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: South

Time: 1651

Description: Orange cone and placard indicate location of boring 1314V3-01-B22



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16

Direction: East

Time: 1341

Description: Orange cone and placard indicate location of boring 1314V3-01-B23



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16  
Direction: East  
Time: 1321

Description: Orange cone and placard indicate location of boring 1314V3-01-B24



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16  
Direction: North  
Time: 1233

Description: Orange cone and placard indicate location of boring 1314V3-01-B25





## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16  
Direction: North  
Time: 1244

Description: Orange cone and placard indicate location of boring 1314V3-01-B26



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/2/16  
Direction: Northwest  
Time: 1006

Description: Orange cone and placard indicate location of boring 1314V3-01-B27



# PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/2/16

Direction: Northwest

Time: 0849

Description: Orange cone and placard indicate location of boring 1314V3-01-B28



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16

Direction: North

Time: 1036

Description: Orange cone and placard indicate location of boring 1314V3-01-B29



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/1/16  
Direction: South  
Time: 1617

Description: Orange cone and placard indicate location of boring 1314V3-01-B30



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/1/16  
Direction: South  
Time: 1619

Description: Orange cone and placard indicate location of boring 1314V3-01-B31



## PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16

Direction: Northwest

Time: 0957

Description: Orange cone and placard indicate location of boring 1314V3-01-B32



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16

Direction: Northwest

Time: 1003

Description: Orange cone and placard indicate location of boring 1314V3-01-B33



# PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/5/16

Direction: Northwest

Time: 1635

Description: Orange cone and placard indicate location of boring 1314V3-01-B34



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/2/16

Direction: Northwest

Time: 1108

Description: Orange cone and placard indicate location of boring 1314V3-01-B35



## PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 12/8/16

Direction: South

Time: 1539

Description: Orange cone and placard indicate location of boring 1314V3-01-B36



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: Northwest

Time: 1015

Description: Orange cone and placard indicate location of boring 1314V3-01-B37



## PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16

Direction: North

Time: 0815

Description: Orange cone and placard indicate location of boring 1314V3-01-B38



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/30/16

Direction: North

Time: 0819

Description: Orange cone and placard indicate location of boring 1314V3-01-B39



## PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: North

Time: 0924

Description: Orange cone and placard indicate location of boring 1314V3-01-B40



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: North

Time: 0922

Description: Orange cone and placard indicate location of boring 1314V3-01-B41





## PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: North

Time: 0920

Description: Orange cone and placard indicate location of boring 1314V3-01-B42



Site: ISGS #1314V3-1 (IDOT ROW)

Date: 11/29/16

Direction: North

Time: 0918

Description: Orange cone and placard indicate location of boring 1314V3-01-B43



# PHOTOGRAPHIC RECORD

Work Order No: 046

Route: FAI 74

Contract Number: PTB 172-027

IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-66  
(Scottish Rite Masonic Center)

Date: 11/30/16  
Direction: Northwest  
Time: 0924

Description: Orange cone and placard indicate location of boring 1314V3-66-B01



Site: ISGS #1314V3-66  
(Scottish Rite Masonic Center)

Date: 11/30/16  
Direction: Northwest  
Time: 0935

Description: Orange cone and placard indicate location of boring 1314V3-66-B02



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-66  
(Scottish Rite Masonic Center)

Date: 12/12/16  
Direction: Southeast  
Time: 1315

Description: Area where E&E conducted a magnetometer survey.



Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: North  
Time: 1615

Description: Orange cone and placard indicate location of boring 1314V3-67-B01



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: South  
Time: 1548

Description: Orange cone and placard indicate location of boring 1314V3-67-B02



Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: South  
Time: 1536

Description: Orange cone and placard indicate location of boring 1314V3-67-B03



# PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: South  
Time: 1452

Description: Orange cone and placard indicate location of boring 1314V3-67-B04



Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: South  
Time: 1453

Description: Orange cone and placard indicate location of boring 1314V3-67-B05



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: Northwest  
Time: 1643

Description: Orange cone and placard indicate location of boring 1314V3-67-B06



Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: Northwest  
Time: 1629

Description: Orange cone and placard indicate location of boring 1314V3-67-B07



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-67  
(Vacant Land)

Date: 11/30/16  
Direction: Northwest  
Time: 1627

Description: Orange cone and placard indicate location of boring 1314V3-67-B08



Site: ISGS #1314V3-67  
(Vacant Land)

Date: 12/12/16  
Direction: Southeast  
Time: 1316

Description: Area where E&E conducted a magnetometer survey.



## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-67  
(Vacant Land)

Date: 12/12/16  
Direction: East  
Time: 1317

Description: Area where E&E conducted a magnetometer survey.



Site: ISGS #1314V3-74 (Residence)

Date: 11/29/16  
Direction: Northwest  
Time: 1016

Description: Orange cone and placard indicate location of boring 1314V3-74-B01





## PHOTOGRAPHIC RECORD

Work Order No: 046  
Route: FAI 74  
Contract Number: PTB 172-027  
IDOT Project Number: P-93-032-01

Site: ISGS #1314V3-75 (Residence)

Date: 11/29/16  
Direction: Northeast  
Time: 1019

Description: Orange cone and placard  
indicate location of boring  
1314V3-  
75-B01



**E**

**Uncontaminated Soil Certification  
Form (on CD-ROM)**