



Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

Mile Marker 136.6 to Mile Marker 138.2

City: New Lenox and Uninc. State: IL Zip Code: 60451

County: Will Township: New Lenox

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

Latitude: 41.51765 Longitude: -87.99400

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.51765 Longitude: -87.99400

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATIONS 1628V2-1-B01 THROUGH -B04, -B06, -B08 THROUGH -B10, -B13 THRU -B28, -B30 THROUGH -B33, -B35, -B36, -B39, -B43, -B44, -B48 THRU -B51, -B55 THROUGH -B57, -B60 THROUGH -B67, -B69 THRU -B72, -B76, -B78, -B80, AND -B81 WERE SAMPLED ADJACENT TO SITE 1628V2-1 SEE TABLE 3a AND FIGURES 2 THRU 11 AND 13 THRU 15 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT

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

TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBERS: 500-146240-1, 500-146241-1, 500-146311-1, 500-146439-1, AND 500-146443-1.

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

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

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

Company Name: Andrews Engineering, Inc.

Street Address: 420 Eisenhower Lane North

City: Lombard State: IL Zip Code: 60148

Phone: 630-953-3332

Savo Radulovic

Printed Name:



July 16, 2018

Date:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:



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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-1
I-80 ROW

Sample ID	1628V2-1-B01	1628V2-1-B02	1628V2-1-B03	1628V2-1-B04	1628V2-1-B06	Maximum Allowable Concentration				
Sample Depth (ft)	0-2	0-2	0-4	0-4	0-7	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	5/31/2018	5/31/2018	5/31/2018	5/31/2018	5/31/2018					
PID	0	0	0	0	0					
Sample pH	8.1	8.5	8	8.5	8.4					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.0098	ND	ND	ND	J 0.014	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	J 0.012	ND	ND	ND	J 0.0089	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	11	7.4	3.8	9.5	7.4	11.3	--	11.3	--	13

Sample ID	1628V2-1-B08	1628V2-1-B09	1628V2-1-B10	1628V2-1-B10 DUP	1628V2-1-B13	Maximum Allowable Concentration				
Sample Depth (ft)	0-7	0-7	0-7	0-7	0-8	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	5/31/2018	5/31/2018	5/31/2018	5/31/2018	5/31/2018					
PID	0	0	0	0	0					
Sample pH	8.3	7.8	8.1	8.2	8					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.01	J 0.014	J 0.016	J 0.014	J 0.012	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	J 0.012	ND	ND	J 0.016	ND	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	7.1	5.9	4.2	5.1	8.2	11.3	--	11.3	--	13

Sample ID	1628V2-1-B14	1628V2-1-B15	1628V2-1-B16	1628V2-1-B17	1628V2-1-B18	Maximum Allowable Concentration					
Sample Depth (ft)	0-8	0-8	0-8	0-8	0-2.5	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area	
Sample Date	5/31/2018	5/31/2018	5/31/2018	5/31/2018	5/31/2018						
PID	0	0	0	0	0						
Sample pH	8	8	8	8.1	7.6						
Matrix	Soil	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	ND	ND	ND	J 0.0094	ND	0.09	0.09	0.98	1.3	2.1	
Benzo(b)fluoranthene	ND	ND	J 0.011	ND	ND	0.9	0.9	0.9	1.5	2.1	
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	0.09	0.09	0.15	0.2	0.42	
Inorganic Compounds, Total (mg/kg)											
Arsenic	8.2	12	1.3	5	7.9	6	11.3	--	11.3	--	13

Sample ID	1628V2-1-B19	1628V2-1-B20	1628V2-1-B20 DUP	1628V2-1-B21	1628V2-1-B22	Maximum Allowable Concentration				
Sample Depth (ft)	0-4	0-3	0-3	0-4.5	0-4.5	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	5/31/2018	5/31/2018	5/31/2018	5/31/2018	5/31/2018					
PID	0	0	0	0	0					
Sample pH	8	7.7	7.7	8.3	8.5					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	0.043	0.05	0.073	J 0.031	ND	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.069	0.08	0.13	0.047	ND	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	J 0.0099	J 0.011	J 0.015	ND	ND	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	3.8	8.8	7.7	5.5	4.1	11.3	--	11.3	--	13

ISGS Site 1628V2-1
I-80 ROW

Sample ID	1628V2-1-B23	1628V2-1-B24	1628V2-1-B25	1628V2-1-B26	1628V2-1-B27	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	0-4	0-4	0-4	0-8	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	5/31/2018	5/31/2018	5/31/2018	5/31/2018	5/31/2018					
PID	0	0	0	0	0					
Sample pH	8.4	7.8	8.5	8.5	7.8					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.032	ND	0.055	J 0.033	ND	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.045	ND	0.073	0.047	ND	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	J 0.01	ND	J 0.0094	ND	ND	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	10	2.6	7.4	7.6	7.8	11.3	--	11.3	--	13

Sample ID	1628V2-1-B28	1628V2-1-B30-1	1628V2-1-B30-1 DUP	1628V2-1-B30-2	1628V2-1-B30-3	Maximum Allowable Concentration				
Sample Depth (ft)	0-8	0-7	0-7	7-14	14-22	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	5/31/2018	6/1/2018	6/1/2018	6/1/2018	6/1/2018					
PID	0	0	0	0	0					
Sample pH	6.3	7.7	7.7	8.1	7.5					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	ND	ND	ND	J 0.026	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	9.7	10	5.8	9.8	8.9	11.3	--	11.3	--	13

Sample ID	1628V2-1-B31	1628V2-1-B32	1628V2-1-B33	1628V2-1-B35	1628V2-1-B36-1	Maximum Allowable Concentration				
Sample Depth (ft)	0-8	0-8	0-8	0-8	0-5	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	6/1/2018	6/1/2018	6/1/2018	6/1/2018	6/4/2018					
PID	0	0	0	0	0					
Sample pH	7.8	8.4	8.2	8.4	7.6					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.0088	J 0.031	ND	J 0.028	J 0.014	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	J 0.011	0.04	ND	ND	ND	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	9.3	6.7	8.4	6.9	7.5	11.3	--	11.3	--	13

Sample ID	1628V2-1-B39-1	1628V2-1-B43-1	1628V2-1-B44	1628V2-1-B48	1628V2-1-B49	Maximum Allowable Concentration				
Sample Depth (ft)	0-1.33	0-4	0-2	0-2	0-2	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	6/4/2018	6/4/2018	6/1/2018	6/1/2018	6/1/2018					
PID	0	0	0	0	0					
Sample pH	7.8	8	7.4	8.9	9					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.031	J 0.016	J 0.026	0.089	0.35, 1.2	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.046	J 0.02	ND	0.16	0.6	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	J 0.0091	J 0.0076	ND	J 0.013	0.034	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	8.6	9.2	8.8	4.3	2.7	11.3	--	11.3	--	13

ISGS Site 1628V2-1
I-80 ROW

Sample ID	1628V2-1-B49 DUP	1628V2-1-B50	1628V2-1-B51	1628V2-1-B55	1628V2-1-B56	Maximum Allowable Concentration									
Sample Depth (ft)	0-2	0-4	0-6.5	0-1	0-1.6	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area					
Sample Date	6/1/2018	6/1/2018	6/1/2018	6/4/2018	6/4/2018										
PID	0	0	0	0	0										
Sample pH	8.9	8.5	8.2	8.8	8.5										
Matrix	Soil	Soil	Soil	Soil	Soil										
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	0.58	1.2	ND	ND	0.17	1.2	0.077	0.09	0.09	0.98	1.3	2.1			
Benzo(b)fluoranthene	1.1	1.2,3	ND	ND	0.32		0.14	0.9	0.9	0.9	1.5	2.1			
Dibenzo(a,h)anthracene	0.1	1.2	ND	ND	J 0.016		ND	0.09	0.09	0.15	0.2	0.42			
Inorganic Compounds, Total (mg/kg)															
Arsenic	2.3		0.67		0.7		7.1		3.7		11.3	--	11.3	--	13

Sample ID	1628V2-1-B57	1628V2-1-B60	1628V2-1-B61	1628V2-1-B62-1	1628V2-1-B62-2	Maximum Allowable Concentration									
Sample Depth (ft)	0-1	0-3	0-6.5	0-5	5-8	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area					
Sample Date	6/4/2018	6/4/2018	6/4/2018	6/4/2018	6/4/2018										
PID	0	0	0	0	0										
Sample pH	8.9	8.8	7.9	7.4	8.3										
Matrix	Soil	Soil	Soil	Soil	Soil										
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	0.034		0.24	1,2	ND		ND	0.09	0.09	0.98	1.3	2.1			
Benzo(b)fluoranthene	0.054		0.47		ND		ND	0.9	0.9	0.9	1.5	2.1			
Dibenzo(a,h)anthracene	ND		0.038		ND		ND	0.09	0.09	0.15	0.2	0.42			
Inorganic Compounds, Total (mg/kg)															
Arsenic	1.7		2.8		6.6		8.3		4.8		11.3	--	11.3	--	13

Sample ID	1628V2-1-B63-1	1628V2-1-B64-1	1628V2-1-B64-2	1628V2-1-B65-1	1628V2-1-B65-2	Maximum Allowable Concentration									
Sample Depth (ft)	0-5.5	0-5	5-10	0-8	8-11	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area					
Sample Date	6/4/2018	6/4/2018	6/4/2018	6/4/2018	6/4/2018										
PID	0	0	0	0	0										
Sample pH	7.5	8	8.2	7.5	8.1										
Matrix	Soil	Soil	Soil	Soil	Soil										
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		J 0.013		ND	0.09	0.09	0.98	1.3	2.1			
Benzo(b)fluoranthene	ND		ND		J 0.014		ND	0.9	0.9	0.9	1.5	2.1			
Dibenzo(a,h)anthracene	ND		ND		ND		ND	0.09	0.09	0.15	0.2	0.42			
Inorganic Compounds, Total (mg/kg)															
Arsenic	12	1,3	9.5		5.7		7.8		9.8		11.3	--	11.3	--	13

Sample ID	1628V2-1-B66-1	1628V2-1-B67-1	1628V2-1-B67-2	1628V2-1-B69	1628V2-1-B70	Maximum Allowable Concentration									
Sample Depth (ft)	0-5.5	0-5	5-8	0-4.5	0-6	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area					
Sample Date	6/4/2018	6/4/2018	6/4/2018	5/31/2018	5/31/2018										
PID	0	0	0	0	0										
Sample pH	7.7	7.3	7.3	7.9	7.4										
Matrix	Soil	Soil	Soil	Soil	Soil										
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		0.048		J 0.014	0.09	0.09	0.98	1.3	2.1			
Benzo(b)fluoranthene	ND		ND		0.076		J 0.017	0.9	0.9	0.9	1.5	2.1			
Dibenzo(a,h)anthracene	ND		ND		J 0.0078		ND	0.09	0.09	0.15	0.2	0.42			
Inorganic Compounds, Total (mg/kg)															
Arsenic	8		6.7		8.5		8.1		6.6		11.3	--	11.3	--	13

ISGS Site 1628V2-1
I-80 ROW

Sample ID	1628V2-1-B71	1628V2-1-B72-1	1628V2-1-B72-1 DUP	1628V2-1-B72-2	1628V2-1-B76	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	0-6	0-6	6-9.5	0-8	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area
Sample Date	5/31/2018	5/31/2018	5/31/2018	5/31/2018	5/31/2018					
PID	0	0	0	0	0					
Sample pH	7.5	7.8	7.6	7.3	7.5					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.023	ND	J 0.013	ND	J 0.029	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	J 0.028	J 0.0098	J 0.016	ND	J 0.011	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	ND	ND	ND	ND	J 0.023	0.09	0.09	0.15	0.2	0.42
Inorganic Compounds, Total (mg/kg)										
Arsenic	7.2	6.3	6.1	8.3	9.2	11.3	--	11.3	--	13

Sample ID	1628V2-1-B76 DUP	1628V2-1-B78	1628V2-1-B80	1628V2-1-B81	Maximum Allowable Concentration					
Sample Depth (ft)	0-8	0-5	0-8	0-5	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area	
Sample Date	5/31/2018	6/4/2018	6/4/2018	6/1/2018						
PID	0	0	0	0						
Sample pH	7.8	8	7.8	8.8						
Matrix	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.039	ND	J 0.027	ND	0.09	0.09	0.98	1.3	2.1	
Benzo(b)fluoranthene	J 0.024	ND	J 0.036	ND	0.9	0.9	0.9	1.5	2.1	
Dibenzo(a,h)anthracene	J 0.027	ND	J 0.0098	ND	0.09	0.09	0.15	0.2	0.42	
Inorganic Compounds, Total (mg/kg)										
Arsenic	6.9	9.5	12	1.3	0.8	11.3	--	11.3	--	13

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: 500-146240-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/11/2018 12:42:41 PM

Richard Wright, Senior Project Manager
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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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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B01

Lab Sample ID: 500-146240-1

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00062	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
1,1-Dichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Acetone	0.018	J	0.020	0.0085	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Bromomethane	<0.0049	*	0.0049	0.0018	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Toluene	<0.0020		0.0020	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Vinyl chloride	<0.0020		0.0020	0.00086	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	05/31/18 18:29	06/05/18 13:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	05/31/18 18:29	06/05/18 13:54	1
4-Bromofluorobenzene (Surr)	108		75 - 131	05/31/18 18:29	06/05/18 13:54	1
Dibromofluoromethane	86		75 - 126	05/31/18 18:29	06/05/18 13:54	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/05/18 13:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19	F1	0.19	0.041	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
1,2-Dichlorobenzene	<0.19	F1	0.19	0.046	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
1,3-Dichlorobenzene	<0.19	F1	0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
1,4-Dichlorobenzene	<0.19	F1	0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B01

Lab Sample ID: 500-146240-1

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2,4,6-Trichlorophenol	<0.38	F1	0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2,4-Dimethylphenol	<0.38	F1	0.38	0.14	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2,4-Dinitrophenol	<0.77	F1	0.77	0.67	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2,6-Dinitrotoluene	<0.19	F1	0.19	0.075	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2-Chloronaphthalene	<0.19	F1	0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2-Chlorophenol	<0.19	F1	0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2-Methylphenol	<0.19	F1	0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
2-Nitrophenol	<0.38	F1	0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
4-Chlorophenyl phenyl ether	<0.19	F1	0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
4-Nitrophenol	<0.77	F1	0.77	0.36	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Benzo[a]anthracene	0.0087	J	0.038	0.0051	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Benzo[a]pyrene	0.0098	J	0.038	0.0074	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Benzo[b]fluoranthene	0.012	J	0.038	0.0083	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Bis(2-chloroethoxy)methane	<0.19	F1	0.19	0.039	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Carbazole	0.11	J	0.19	0.096	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Chrysene	0.011	J	0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Dibenzofuran	<0.19	F1	0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Dimethyl phthalate	<0.19	F1	0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Di-n-butyl phthalate	<0.19	F1	0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Fluoranthene	0.017	J	0.038	0.0071	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Hexachloroethane	<0.19	F1	0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B01

Lab Sample ID: 500-146240-1

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Naphthalene	<0.038	F1	0.038	0.0059	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Nitrobenzene	<0.038	F1	0.038	0.0095	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Phenanthrene	0.0069	J	0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Pyrene	0.016	J	0.038	0.0076	mg/Kg	☼	06/04/18 07:29	06/07/18 13:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	43		25 - 139				06/04/18 07:29	06/07/18 13:24	1
2-Fluorobiphenyl	73		44 - 121				06/04/18 07:29	06/07/18 13:24	1
2-Fluorophenol	95		46 - 133				06/04/18 07:29	06/07/18 13:24	1
Nitrobenzene-d5	67		41 - 120				06/04/18 07:29	06/07/18 13:24	1
Phenol-d5	84		46 - 125				06/04/18 07:29	06/07/18 13:24	1
Terphenyl-d14	99		35 - 160				06/04/18 07:29	06/07/18 13:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.22	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Arsenic	11	F1	0.55	0.19	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Barium	51		0.55	0.063	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Beryllium	0.58		0.22	0.052	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Boron	6.7	F1	2.8	0.26	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Cadmium	0.35	B	0.11	0.020	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Calcium	62000	B	110	19	mg/Kg	☼	06/01/18 15:45	06/05/18 13:38	10
Chromium	13		0.55	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Cobalt	11		0.28	0.073	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Copper	23		0.55	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Iron	21000		11	5.8	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Lead	15	F1	0.28	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Magnesium	25000		5.5	2.8	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Manganese	410		0.55	0.080	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Nickel	27		0.55	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Potassium	1500	F1	28	9.8	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Selenium	0.44	J F1	0.55	0.33	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Silver	0.18	J	0.28	0.072	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Sodium	1800	F1	55	8.2	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Thallium	<0.55	F1	0.55	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Vanadium	18		0.28	0.065	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1
Zinc	73		1.1	0.49	mg/Kg	☼	06/01/18 15:45	06/04/18 20:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 14:43	06/06/18 18:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:43	06/06/18 18:52	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 18:52	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 18:52	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B01

Lab Sample ID: 500-146240-1

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 18:52	1
Manganese	0.67		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 18:52	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 18:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.070		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 16:57	1
Barium	0.60		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 16:57	1
Beryllium	0.0060		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 16:57	1
Boron	0.21		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 16:57	1
Cadmium	0.0034	J	0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 16:57	1
Calcium	29		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 16:57	1
Chromium	0.17		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 16:57	1
Cobalt	0.050		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 16:57	1
Iron	190		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 16:57	1
Lead	0.065		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 16:57	1
Manganese	0.62		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 16:57	1
Nickel	0.16		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 16:57	1
Potassium	38		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 16:57	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 16:57	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 16:57	1
Zinc	0.58	B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 16:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:43	06/07/18 22:37	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 13:19	1
Thallium	0.0050		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 13:19	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00023		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.017	0.0057	mg/Kg	☼	06/04/18 15:05	06/06/18 07:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	06/08/18 13:50	06/09/18 16:21	1
pH	8.1		0.20	0.20	SU			06/06/18 13:43	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B02

Lab Sample ID: 500-146240-2

Date Collected: 05/31/18 09:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Bromomethane	<0.0041	*	0.0041	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 14:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	05/31/18 18:29	06/05/18 14:21	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/05/18 14:21	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/05/18 14:21	1
Toluene-d8 (Surr)	96		75 - 124	05/31/18 18:29	06/05/18 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B02

Lab Sample ID: 500-146240-2

Date Collected: 05/31/18 09:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B02

Lab Sample ID: 500-146240-2

Date Collected: 05/31/18 09:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/04/18 07:29	06/07/18 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	44		25 - 139				06/04/18 07:29	06/07/18 13:52	1
2-Fluorobiphenyl	65		44 - 121				06/04/18 07:29	06/07/18 13:52	1
2-Fluorophenol	81		46 - 133				06/04/18 07:29	06/07/18 13:52	1
Nitrobenzene-d5	60		41 - 120				06/04/18 07:29	06/07/18 13:52	1
Phenol-d5	41	X	46 - 125				06/04/18 07:29	06/07/18 13:52	1
Terphenyl-d14	88		35 - 160				06/04/18 07:29	06/07/18 13:52	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Arsenic	7.4		0.59	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Barium	65		0.59	0.067	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Beryllium	0.74		0.24	0.055	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Boron	8.5		3.0	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Cadmium	0.29	B	0.12	0.021	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Calcium	87000	B	120	20	mg/Kg	☼	06/01/18 15:45	06/05/18 13:58	10
Chromium	18		0.59	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Cobalt	12		0.30	0.078	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Copper	22		0.59	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Iron	21000		12	6.2	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Lead	11		0.30	0.14	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Manganese	390		0.59	0.086	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Nickel	30		0.59	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Potassium	2200		30	10	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Silver	0.19	J	0.30	0.076	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Sodium	1800		59	8.8	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Thallium	<0.59		0.59	0.30	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Vanadium	23		0.30	0.070	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1
Zinc	56		1.2	0.52	mg/Kg	☼	06/01/18 15:45	06/04/18 20:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 14:43	06/06/18 20:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:43	06/06/18 20:39	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 20:39	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 20:39	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B02

Lab Sample ID: 500-146240-2

Date Collected: 05/31/18 09:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 20:39	1
Manganese	3.8		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 20:39	1
Nickel	0.024	J	0.025	0.010	mg/L		06/05/18 14:43	06/06/18 20:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.071		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:01	1
Barium	0.81		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:01	1
Beryllium	0.0090		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:01	1
Boron	0.30		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:01	1
Cadmium	0.0033	J	0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:01	1
Calcium	91		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:01	1
Chromium	0.23		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:01	1
Cobalt	0.062		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:01	1
Iron	220		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:01	1
Lead	0.084		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:01	1
Manganese	0.96		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:01	1
Nickel	0.22		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:01	1
Potassium	51		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:01	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:01	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:01	1
Zinc	0.53	B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:43	06/07/18 23:25	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 13:23	1
Thallium	0.0037		0.0020	0.0020	mg/L		06/05/18 15:59	06/07/18 14:49	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00035		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 09:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0058	mg/Kg	☼	06/04/18 15:05	06/06/18 07:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/08/18 13:50	06/09/18 16:22	1
pH	8.5		0.20	0.20	SU			06/06/18 13:45	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B03

Lab Sample ID: 500-146240-3

Date Collected: 05/31/18 09:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Acetone	0.011	J	0.017	0.0075	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	05/31/18 18:29	06/05/18 14:48	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/05/18 14:48	1
Dibromofluoromethane	86		75 - 126	05/31/18 18:29	06/05/18 14:48	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/05/18 14:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B03

Lab Sample ID: 500-146240-3

Date Collected: 05/31/18 09:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Fluoranthene	<0.040		0.040	0.0076	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B03

Lab Sample ID: 500-146240-3

Date Collected: 05/31/18 09:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	06/04/18 07:29	06/05/18 11:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		25 - 139				06/04/18 07:29	06/05/18 11:50	1
2-Fluorobiphenyl	79		44 - 121				06/04/18 07:29	06/05/18 11:50	1
2-Fluorophenol	106		46 - 133				06/04/18 07:29	06/05/18 11:50	1
Nitrobenzene-d5	84		41 - 120				06/04/18 07:29	06/05/18 11:50	1
Phenol-d5	50		46 - 125				06/04/18 07:29	06/05/18 11:50	1
Terphenyl-d14	91		35 - 160				06/04/18 07:29	06/05/18 11:50	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	☼	06/01/18 15:45	06/04/18 20:52	1
Arsenic	3.8		0.61	0.21	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Barium	73		0.61	0.069	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Beryllium	0.67		0.24	0.057	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Boron	1.8 J		3.0	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Cadmium	0.23 B		0.12	0.022	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Calcium	2500 B		12	2.1	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Chromium	15		0.61	0.30	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Cobalt	8.6		0.30	0.080	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Copper	17		0.61	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Iron	18000		12	6.3	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Lead	13		0.30	0.14	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Magnesium	2700		6.1	3.0	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Manganese	310		0.61	0.088	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Nickel	28		0.61	0.18	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Potassium	690		30	11	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Selenium	0.94		0.61	0.36	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Silver	0.34		0.30	0.079	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Sodium	1300		61	9.0	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Vanadium	20		0.30	0.072	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1
Zinc	61		1.2	0.53	mg/Kg	☼	06/01/18 15:45	06/04/18 20:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:43	06/06/18 18:56	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 18:56	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 18:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 18:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B03

Lab Sample ID: 500-146240-3

Date Collected: 05/31/18 09:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.028		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 18:56	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 18:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.042	J	0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:05	1
Barium	0.72		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:05	1
Beryllium	0.0067		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:05	1
Boron	0.074	J	0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:05	1
Calcium	22		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:05	1
Chromium	0.24		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:05	1
Cobalt	0.034		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:05	1
Iron	230		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:05	1
Lead	0.062		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:05	1
Manganese	0.50		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:05	1
Nickel	0.17		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:05	1
Potassium	20		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:05	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:05	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:05	1
Zinc	0.53	B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:43	06/07/18 22:41	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 13:27	1
Thallium	0.0031		0.0020	0.0020	mg/L		06/05/18 15:59	06/07/18 14:50	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00072		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 09:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.052		0.020	0.0065	mg/Kg	☼	06/04/18 15:05	06/06/18 07:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.61		0.61	0.21	mg/Kg	☼	06/08/18 13:50	06/09/18 16:22	1
pH	8.0		0.20	0.20	SU			06/06/18 13:48	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B04

Lab Sample ID: 500-146240-4

Date Collected: 05/31/18 09:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	05/31/18 18:29	06/05/18 15:15	1
4-Bromofluorobenzene (Surr)	107		75 - 131	05/31/18 18:29	06/05/18 15:15	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/05/18 15:15	1
Toluene-d8 (Surr)	96		75 - 124	05/31/18 18:29	06/05/18 15:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B04

Lab Sample ID: 500-146240-4

Date Collected: 05/31/18 09:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Benzo[b]fluoranthene	0.0089	J	0.038	0.0082	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B04

Lab Sample ID: 500-146240-4

Date Collected: 05/31/18 09:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 12:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	104		25 - 139				06/04/18 07:29	06/05/18 12:16	1
2-Fluorobiphenyl	84		44 - 121				06/04/18 07:29	06/05/18 12:16	1
2-Fluorophenol	116		46 - 133				06/04/18 07:29	06/05/18 12:16	1
Nitrobenzene-d5	90		41 - 120				06/04/18 07:29	06/05/18 12:16	1
Phenol-d5	96		46 - 125				06/04/18 07:29	06/05/18 12:16	1
Terphenyl-d14	98		35 - 160				06/04/18 07:29	06/05/18 12:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Arsenic	9.5		0.58	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Barium	51		0.58	0.066	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Beryllium	0.60		0.23	0.054	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Boron	7.9		2.9	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Cadmium	0.33	B	0.12	0.021	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Calcium	87000	B	120	20	mg/Kg	☼	06/01/18 15:45	06/05/18 14:02	10
Chromium	14		0.58	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Cobalt	11		0.29	0.076	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Copper	22		0.58	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Iron	21000		12	6.0	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Lead	12		0.29	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Magnesium	28000		5.8	2.9	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Manganese	500		0.58	0.084	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Nickel	30		0.58	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Potassium	1700		29	10	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Selenium	0.51	J	0.58	0.34	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Silver	0.16	J	0.29	0.075	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Sodium	970		58	8.6	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Vanadium	17		0.29	0.068	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1
Zinc	67		1.2	0.51	mg/Kg	☼	06/01/18 15:45	06/04/18 20:56	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 14:43	06/06/18 20:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:43	06/06/18 20:43	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 20:43	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 20:43	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B04

Lab Sample ID: 500-146240-4

Date Collected: 05/31/18 09:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 20:43	1
Manganese	4.0		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 20:43	1
Nickel	0.029		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 20:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.095		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:09	1
Barium	0.67		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:09	1
Beryllium	0.0075		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:09	1
Boron	0.26		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:09	1
Cadmium	0.0033	J	0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:09	1
Calcium	42		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:09	1
Chromium	0.19		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:09	1
Cobalt	0.065		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:09	1
Iron	220		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:09	1
Lead	0.073		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:09	1
Manganese	0.80		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:09	1
Nickel	0.20		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:09	1
Potassium	44		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:09	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:09	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:09	1
Zinc	0.66	B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:43	06/07/18 23:29	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 13:31	1
Thallium	0.0062		0.0020	0.0020	mg/L		06/05/18 15:59	06/07/18 14:51	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00037		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 09:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.018	0.0059	mg/Kg	☼	06/04/18 15:05	06/06/18 07:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	06/08/18 13:50	06/09/18 16:22	1
pH	8.5		0.20	0.20	SU			06/06/18 13:51	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B06

Lab Sample ID: 500-146240-6

Date Collected: 05/31/18 10:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Acetone	0.014	J	0.017	0.0073	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	05/31/18 18:29	06/05/18 16:09	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/05/18 16:09	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/05/18 16:09	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/05/18 16:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B06

Lab Sample ID: 500-146240-6

Date Collected: 05/31/18 10:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Benzo[a]anthracene	0.0073	J	0.040	0.0054	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Benzo[a]pyrene	0.014	J	0.040	0.0078	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Fluoranthene	0.014	J	0.040	0.0074	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B06

Lab Sample ID: 500-146240-6

Date Collected: 05/31/18 10:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.011	J	0.040	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Phenanthrene	0.013	J	0.040	0.0056	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Pyrene	0.011	J	0.040	0.0080	mg/Kg	☼	06/04/18 07:29	06/05/18 13:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		25 - 139				06/04/18 07:29	06/05/18 13:09	1
2-Fluorobiphenyl	84		44 - 121				06/04/18 07:29	06/05/18 13:09	1
2-Fluorophenol	113		46 - 133				06/04/18 07:29	06/05/18 13:09	1
Nitrobenzene-d5	88		41 - 120				06/04/18 07:29	06/05/18 13:09	1
Phenol-d5	103		46 - 125				06/04/18 07:29	06/05/18 13:09	1
Terphenyl-d14	97		35 - 160				06/04/18 07:29	06/05/18 13:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Arsenic	7.4		0.59	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Barium	86		0.59	0.067	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Beryllium	0.70		0.23	0.055	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Boron	5.1		2.9	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Cadmium	0.29	B	0.12	0.021	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Calcium	26000	B	12	2.0	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Chromium	15		0.59	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Cobalt	11		0.29	0.077	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Copper	19		0.59	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Iron	20000		12	6.1	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Lead	15		0.29	0.14	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Magnesium	14000		5.9	2.9	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Manganese	500		0.59	0.085	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Nickel	24		0.59	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Potassium	1300		29	10	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Selenium	1.3		0.59	0.34	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Silver	0.20	J	0.29	0.076	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Sodium	1900		59	8.7	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Vanadium	24		0.29	0.069	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1
Zinc	71		1.2	0.51	mg/Kg	☼	06/01/18 15:45	06/04/18 21:04	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 14:43	06/06/18 19:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:43	06/06/18 19:04	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:04	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 19:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B06

Lab Sample ID: 500-146240-6

Date Collected: 05/31/18 10:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 19:04	1
Manganese	1.7		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:04	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.056		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:18	1
Barium	0.60		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:18	1
Beryllium	0.0054		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:18	1
Boron	0.14		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:18	1
Cadmium	0.0024	J	0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:18	1
Calcium	27		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:18	1
Chromium	0.17		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:18	1
Cobalt	0.041		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:18	1
Iron	170		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:18	1
Lead	0.063		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:18	1
Manganese	1.1		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:18	1
Nickel	0.13		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:18	1
Potassium	24		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:18	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:18	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:18	1
Zinc	0.51	B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:43	06/07/18 22:49	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 13:39	1
Thallium	0.0021		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 13:39	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00027		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 09:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.019	0.0064	mg/Kg	☼	06/04/18 15:05	06/06/18 07:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	06/08/18 13:50	06/09/18 16:23	1
pH	8.4		0.20	0.20	SU			06/06/18 13:56	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B08

Lab Sample ID: 500-146240-8

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Acetone	0.020		0.017	0.0076	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Bromomethane	<0.0044	*	0.0044	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 134	05/31/18 18:29	06/05/18 17:02	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/05/18 17:02	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/05/18 17:02	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/05/18 17:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B08

Lab Sample ID: 500-146240-8

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Benzo[a]pyrene	0.010	J	0.038	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Benzo[b]fluoranthene	0.012	J	0.038	0.0082	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B08

Lab Sample ID: 500-146240-8

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 14:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		25 - 139				06/04/18 07:29	06/05/18 14:01	1
2-Fluorobiphenyl	76		44 - 121				06/04/18 07:29	06/05/18 14:01	1
2-Fluorophenol	113		46 - 133				06/04/18 07:29	06/05/18 14:01	1
Nitrobenzene-d5	79		41 - 120				06/04/18 07:29	06/05/18 14:01	1
Phenol-d5	97		46 - 125				06/04/18 07:29	06/05/18 14:01	1
Terphenyl-d14	92		35 - 160				06/04/18 07:29	06/05/18 14:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Arsenic	7.1		0.55	0.19	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Barium	69		0.55	0.062	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Beryllium	0.66		0.22	0.051	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Boron	5.2		2.7	0.25	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Cadmium	0.30	B	0.11	0.020	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Calcium	22000	B	11	1.8	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Chromium	15		0.55	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Cobalt	10		0.27	0.071	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Copper	20		0.55	0.15	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Iron	20000		11	5.7	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Lead	14		0.27	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Magnesium	12000		5.5	2.7	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Manganese	390		0.55	0.079	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Nickel	27		0.55	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Potassium	1400		27	9.7	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Selenium	0.56		0.55	0.32	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Silver	0.19	J	0.27	0.070	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Sodium	830		55	8.1	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Thallium	0.39	J	0.55	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Vanadium	19		0.27	0.064	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1
Zinc	73		1.1	0.48	mg/Kg	☼	06/01/18 15:45	06/04/18 21:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 14:43	06/06/18 19:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:43	06/06/18 19:21	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:21	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 19:21	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B08

Lab Sample ID: 500-146240-8

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 19:21	1
Manganese	0.43		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:21	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.070		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:25	1
Barium	0.60		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:25	1
Beryllium	0.0064		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:25	1
Boron	0.21		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:25	1
Cadmium	0.0032	J	0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:25	1
Calcium	28		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:25	1
Chromium	0.17		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:25	1
Cobalt	0.042		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:25	1
Iron	190		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:25	1
Lead	0.066		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:25	1
Manganese	0.76		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:25	1
Nickel	0.15		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:25	1
Potassium	36		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:25	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:25	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:25	1
Zinc	0.50	B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:43	06/07/18 23:09	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 13:47	1
Thallium	0.0031		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 13:47	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00041		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 09:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0060	mg/Kg	☼	06/04/18 15:05	06/06/18 07:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/08/18 13:50	06/09/18 16:24	1
pH	8.3		0.20	0.20	SU			06/06/18 14:02	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B09

Lab Sample ID: 500-146240-9

Date Collected: 05/31/18 10:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Acetone	0.021		0.015	0.0067	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Bromomethane	<0.0038	*	0.0038	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	05/31/18 18:29	06/05/18 17:29	1
4-Bromofluorobenzene (Surr)	119		75 - 131	05/31/18 18:29	06/05/18 17:29	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/05/18 17:29	1
Toluene-d8 (Surr)	99		75 - 124	05/31/18 18:29	06/05/18 17:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B09

Lab Sample ID: 500-146240-9

Date Collected: 05/31/18 10:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Benzo[a]anthracene	0.0055	J	0.038	0.0052	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Benzo[a]pyrene	0.014	J	0.038	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Benzo[g,h,i]perylene	0.016	J	0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Chrysene	0.019	J	0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Fluoranthene	0.0087	J	0.038	0.0072	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B09

Lab Sample ID: 500-146240-9

Date Collected: 05/31/18 10:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Phenanthrene	0.0093	J	0.038	0.0054	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Pyrene	0.022	J	0.038	0.0077	mg/Kg	☼	06/04/18 07:29	06/05/18 16:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		25 - 139				06/04/18 07:29	06/05/18 16:12	1
2-Fluorobiphenyl	87		44 - 121				06/04/18 07:29	06/05/18 16:12	1
2-Fluorophenol	117		46 - 133				06/04/18 07:29	06/05/18 16:12	1
Nitrobenzene-d5	91		41 - 120				06/04/18 07:29	06/05/18 16:12	1
Phenol-d5	104		46 - 125				06/04/18 07:29	06/05/18 16:12	1
Terphenyl-d14	96		35 - 160				06/04/18 07:29	06/05/18 16:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Arsenic	5.9		0.54	0.18	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Barium	35		0.54	0.061	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Beryllium	0.54		0.22	0.050	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Boron	6.8		2.7	0.25	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Cadmium	0.24	B	0.11	0.019	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Calcium	79000	B	110	18	mg/Kg	☼	06/01/18 15:45	06/05/18 14:10	10
Chromium	12		0.54	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Cobalt	9.6		0.27	0.070	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Copper	22		0.54	0.15	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Iron	18000		11	5.6	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Lead	10		0.27	0.12	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Magnesium	26000		5.4	2.7	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Manganese	420		0.54	0.078	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Nickel	25		0.54	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Potassium	1900		27	9.5	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Selenium	0.47	J	0.54	0.32	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Silver	0.15	J	0.27	0.069	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Sodium	190		54	8.0	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Vanadium	15		0.27	0.063	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1
Zinc	55		1.1	0.47	mg/Kg	☼	06/01/18 15:45	06/04/18 21:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:37	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:37	1
Boron	<0.10		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B09

Lab Sample ID: 500-146240-9

Date Collected: 05/31/18 10:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:37	1
Calcium	13		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:37	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:37	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:37	1
Iron	3.3		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:37	1
Manganese	0.033		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:37	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:37	1
Potassium	3.1		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:37	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:37	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:37	1
Zinc	0.020	J B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:37	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:15	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0065	mg/Kg	☼	06/04/18 15:05	06/06/18 08:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	06/08/18 13:50	06/09/18 16:25	1
pH	7.8		0.20	0.20	SU			06/06/18 14:05	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10

Lab Sample ID: 500-146240-10

Date Collected: 05/31/18 10:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Acetone	0.021		0.017	0.0073	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	05/31/18 18:29	06/05/18 17:55	1
4-Bromofluorobenzene (Surr)	118		75 - 131	05/31/18 18:29	06/05/18 17:55	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/05/18 17:55	1
Toluene-d8 (Surr)	99		75 - 124	05/31/18 18:29	06/05/18 17:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10

Lab Sample ID: 500-146240-10

Date Collected: 05/31/18 10:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2-Methylnaphthalene	0.0072	J	0.077	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Benzo[a]pyrene	0.016	J	0.038	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Benzo[g,h,i]perylene	0.019	J	0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Bis(2-ethylhexyl) phthalate	0.081	J	0.19	0.069	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Chrysene	0.021	J	0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Fluoranthene	0.0078	J	0.038	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10

Lab Sample ID: 500-146240-10

Date Collected: 05/31/18 10:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Phenanthrene	0.026	J	0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Pyrene	0.020	J	0.038	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 16:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		25 - 139				06/04/18 07:29	06/05/18 16:38	1
2-Fluorobiphenyl	87		44 - 121				06/04/18 07:29	06/05/18 16:38	1
2-Fluorophenol	121		46 - 133				06/04/18 07:29	06/05/18 16:38	1
Nitrobenzene-d5	90		41 - 120				06/04/18 07:29	06/05/18 16:38	1
Phenol-d5	114		46 - 125				06/04/18 07:29	06/05/18 16:38	1
Terphenyl-d14	96		35 - 160				06/04/18 07:29	06/05/18 16:38	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Arsenic	4.2		0.53	0.18	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Barium	39		0.53	0.061	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Beryllium	0.63		0.21	0.050	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Boron	7.4		2.7	0.25	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Cadmium	0.22	B	0.11	0.019	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Calcium	78000	B	110	18	mg/Kg	☼	06/01/18 15:45	06/05/18 14:22	10
Chromium	15		0.53	0.26	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Cobalt	9.8		0.27	0.070	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Copper	21		0.53	0.15	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Iron	19000		11	5.6	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Lead	22		0.27	0.12	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Magnesium	24000		5.3	2.6	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Manganese	360		0.53	0.077	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Nickel	27		0.53	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Potassium	2300		27	9.5	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Selenium	0.76		0.53	0.31	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Silver	0.19	J	0.27	0.069	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Sodium	310		53	7.9	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Vanadium	17		0.27	0.063	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1
Zinc	56		1.1	0.47	mg/Kg	☼	06/01/18 15:45	06/04/18 21:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/05/18 14:43	06/06/18 19:29	1
Manganese	2.8		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:29	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10

Lab Sample ID: 500-146240-10

Date Collected: 05/31/18 10:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:42	1
Barium	0.18	J	0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:42	1
Boron	0.092	J	0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:42	1
Calcium	24		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:42	1
Chromium	0.044		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:42	1
Cobalt	0.012	J	0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:42	1
Iron	24		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:42	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:42	1
Manganese	0.27		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:42	1
Nickel	0.035		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:42	1
Potassium	17		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:42	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:42	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:42	1
Zinc	0.057	J B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:42	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:19	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.017	0.0057	mg/Kg	☼	06/04/18 15:05	06/06/18 08:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	06/08/18 13:50	06/09/18 16:25	1
pH	8.1		0.20	0.20	SU			06/06/18 14:07	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10 Dup

Lab Sample ID: 500-146240-11

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	05/31/18 18:29	06/05/18 18:22	1
4-Bromofluorobenzene (Surr)	115		75 - 131	05/31/18 18:29	06/05/18 18:22	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/05/18 18:22	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/05/18 18:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10 Dup

Lab Sample ID: 500-146240-11

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Benzo[a]pyrene	0.014	J	0.039	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Benzo[b]fluoranthene	0.016	J	0.039	0.0084	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Benzo[g,h,i]perylene	0.016	J	0.039	0.013	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Chrysene	0.019	J	0.039	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Fluoranthene	0.0082	J	0.039	0.0072	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10 Dup

Lab Sample ID: 500-146240-11

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Phenanthrene	0.033	J	0.039	0.0054	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Pyrene	0.019	J	0.039	0.0077	mg/Kg	☼	06/04/18 07:29	06/05/18 14:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		25 - 139				06/04/18 07:29	06/05/18 14:28	1
2-Fluorobiphenyl	87		44 - 121				06/04/18 07:29	06/05/18 14:28	1
2-Fluorophenol	121		46 - 133				06/04/18 07:29	06/05/18 14:28	1
Nitrobenzene-d5	93		41 - 120				06/04/18 07:29	06/05/18 14:28	1
Phenol-d5	110		46 - 125				06/04/18 07:29	06/05/18 14:28	1
Terphenyl-d14	96		35 - 160				06/04/18 07:29	06/05/18 14:28	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	☼	06/01/18 15:45	06/04/18 21:33	1
Arsenic	5.1		0.57	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Barium	41		0.57	0.065	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Beryllium	0.71		0.23	0.054	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Boron	9.6		2.9	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Cadmium	0.29	B	0.11	0.021	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Calcium	78000	B	110	19	mg/Kg	☼	06/01/18 15:45	06/05/18 14:26	10
Chromium	16		0.57	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Cobalt	11		0.29	0.075	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Copper	21		0.57	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Iron	20000		11	6.0	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Lead	11		0.29	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Magnesium	26000		5.7	2.8	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Manganese	340		0.57	0.083	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Nickel	31		0.57	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Potassium	2500		29	10	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Selenium	0.53	J	0.57	0.34	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Silver	0.18	J	0.29	0.074	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Sodium	390		57	8.5	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Vanadium	19		0.29	0.068	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1
Zinc	60		1.1	0.50	mg/Kg	☼	06/01/18 15:45	06/04/18 21:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 19:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 19:33	1
Manganese	2.0		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:33	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B10 Dup

Lab Sample ID: 500-146240-11

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:46	1
Barium	0.35	J	0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:46	1
Boron	0.20		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:46	1
Cadmium	0.0026	J	0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:46	1
Calcium	39		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:46	1
Chromium	0.094		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:46	1
Cobalt	0.027		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:46	1
Iron	57		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:46	1
Lead	0.0077		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:46	1
Manganese	0.49		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:46	1
Nickel	0.074		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:46	1
Potassium	33		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:46	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:46	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:46	1
Zinc	0.18	J B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:46	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0063	mg/Kg	☼	06/04/18 15:05	06/06/18 08:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	06/08/18 13:50	06/09/18 16:25	1
pH	8.2		0.20	0.20	SU			06/06/18 14:10	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B13

Lab Sample ID: 500-146240-15

Date Collected: 05/31/18 11:20

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Bromomethane	<0.0038	*	0.0038	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/31/18 18:29	06/05/18 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	05/31/18 18:29	06/05/18 20:09	1
4-Bromofluorobenzene (Surr)	111		75 - 131	05/31/18 18:29	06/05/18 20:09	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/05/18 20:09	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/05/18 20:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B13

Lab Sample ID: 500-146240-15

Date Collected: 05/31/18 11:20

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Benzo[a]pyrene	0.012	J	0.039	0.0076	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Benzo[g,h,i]perylene	0.015	J	0.039	0.013	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Chrysene	0.018	J	0.039	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Fluoranthene	0.0096	J	0.039	0.0073	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B13

Lab Sample ID: 500-146240-15

Date Collected: 05/31/18 11:20

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Phenanthrene	0.011	J	0.039	0.0055	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Pyrene	0.021	J	0.039	0.0078	mg/Kg	☼	06/04/18 07:29	06/05/18 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		25 - 139				06/04/18 07:29	06/05/18 15:46	1
2-Fluorobiphenyl	82		44 - 121				06/04/18 07:29	06/05/18 15:46	1
2-Fluorophenol	114		46 - 133				06/04/18 07:29	06/05/18 15:46	1
Nitrobenzene-d5	89		41 - 120				06/04/18 07:29	06/05/18 15:46	1
Phenol-d5	99		46 - 125				06/04/18 07:29	06/05/18 15:46	1
Terphenyl-d14	93		35 - 160				06/04/18 07:29	06/05/18 15:46	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Arsenic	8.2		0.58	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Barium	38		0.58	0.066	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Beryllium	0.68		0.23	0.054	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Boron	9.3		2.9	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Cadmium	0.29	B	0.12	0.021	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Calcium	78000	B	120	20	mg/Kg	☼	06/01/18 15:45	06/05/18 14:34	10
Chromium	15		0.58	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Cobalt	11		0.29	0.076	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Copper	22		0.58	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Iron	22000		12	6.1	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Lead	12		0.29	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Magnesium	26000		5.8	2.9	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Manganese	360		0.58	0.085	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Nickel	30		0.58	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Potassium	2200		29	10	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Selenium	0.64		0.58	0.34	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Silver	0.17	J	0.29	0.075	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Sodium	440		58	8.6	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Vanadium	19		0.29	0.069	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1
Zinc	64		1.2	0.51	mg/Kg	☼	06/01/18 15:45	06/04/18 21:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 17:57	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 17:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 17:57	1
Boron	<0.10		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 17:57	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B13

Lab Sample ID: 500-146240-15

Date Collected: 05/31/18 11:20

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 17:57	1
Calcium	9.0		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:57	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:57	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:57	1
Iron	1.2		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 17:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 17:57	1
Manganese	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:57	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:57	1
Potassium	1.2 J		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 17:57	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 17:57	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 17:57	1
Zinc	0.041 J B		0.50	0.020	mg/L		06/05/18 15:59	06/06/18 17:57	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:35	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014 J		0.019	0.0065	mg/Kg	☼	06/04/18 15:05	06/05/18 18:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	06/07/18 18:15	06/08/18 15:18	1
pH	8.0		0.20	0.20	SU			06/06/18 14:18	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B14

Lab Sample ID: 500-146240-16

Date Collected: 05/31/18 11:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Bromomethane	<0.0046	*	0.0046	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	05/31/18 18:29	06/05/18 20:35	1
4-Bromofluorobenzene (Surr)	107		75 - 131	05/31/18 18:29	06/05/18 20:35	1
Dibromofluoromethane	85		75 - 126	05/31/18 18:29	06/05/18 20:35	1
Toluene-d8 (Surr)	96		75 - 124	05/31/18 18:29	06/05/18 20:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B14

Lab Sample ID: 500-146240-16

Date Collected: 05/31/18 11:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Chrysene	0.011	J	0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B14

Lab Sample ID: 500-146240-16

Date Collected: 05/31/18 11:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/04/18 07:29	06/05/18 15:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		25 - 139				06/04/18 07:29	06/05/18 15:20	1
2-Fluorobiphenyl	65		44 - 121				06/04/18 07:29	06/05/18 15:20	1
2-Fluorophenol	84		46 - 133				06/04/18 07:29	06/05/18 15:20	1
Nitrobenzene-d5	64		41 - 120				06/04/18 07:29	06/05/18 15:20	1
Phenol-d5	84		46 - 125				06/04/18 07:29	06/05/18 15:20	1
Terphenyl-d14	73		35 - 160				06/04/18 07:29	06/05/18 15:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Arsenic	8.2		0.58	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Barium	48		0.58	0.066	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Beryllium	0.63		0.23	0.054	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Boron	10		2.9	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Cadmium	0.35	B	0.12	0.021	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Calcium	94000	B	120	20	mg/Kg	☼	06/01/18 15:45	06/05/18 14:38	10
Chromium	15		0.58	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Cobalt	14		0.29	0.076	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Copper	23		0.58	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Iron	20000		12	6.0	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Lead	13		0.29	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Magnesium	28000		5.8	2.9	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Manganese	480		0.58	0.084	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Nickel	33		0.58	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Potassium	1900		29	10	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Selenium	0.64		0.58	0.34	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Silver	0.19	J	0.29	0.075	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Sodium	900		58	8.6	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Vanadium	18		0.29	0.068	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1
Zinc	65		1.2	0.51	mg/Kg	☼	06/01/18 15:45	06/04/18 21:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:43	06/06/18 19:50	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:50	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:43	06/06/18 19:50	1
Manganese	1.1		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:50	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B14

Lab Sample ID: 500-146240-16

Date Collected: 05/31/18 11:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:43	06/06/18 19:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.024	J	0.050	0.010	mg/L		06/05/18 15:59	06/06/18 18:02	1
Barium	0.47	J	0.50	0.050	mg/L		06/05/18 15:59	06/06/18 18:02	1
Beryllium	0.0051		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 18:02	1
Boron	0.30		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 18:02	1
Cadmium	0.0035	J	0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 18:02	1
Calcium	46		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:02	1
Chromium	0.13		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:02	1
Cobalt	0.032		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:02	1
Iron	110		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 18:02	1
Lead	<0.038		0.038	0.038	mg/L		06/05/18 15:59	06/07/18 11:59	5
Manganese	0.45		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:02	1
Nickel	0.11		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:02	1
Potassium	43		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:02	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 18:02	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:02	1
Zinc	0.28	J B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 18:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:43	06/07/18 23:17	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:39	1
Thallium	0.0021		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:39	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0062	mg/Kg	☼	06/04/18 15:05	06/05/18 18:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.19	J	0.54	0.19	mg/Kg	☼	06/07/18 18:15	06/08/18 15:18	1
pH	8.0		0.20	0.20	SU			06/06/18 14:21	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B15

Lab Sample ID: 500-146240-17

Date Collected: 05/31/18 11:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0045		0.0045	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
1,1,2,2-Tetrachloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
1,1,2-Trichloroethane	<0.0045		0.0045	0.0019	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
1,1-Dichloroethane	<0.0045		0.0045	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
1,1-Dichloroethene	<0.0045		0.0045	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
1,2-Dichloroethane	<0.011		0.011	0.0035	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
1,2-Dichloropropane	<0.0045		0.0045	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
1,3-Dichloropropene, Total	<0.0045		0.0045	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
2-Butanone (MEK)	<0.011		0.011	0.0050	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
2-Hexanone	<0.011		0.011	0.0035	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
4-Methyl-2-pentanone (MIBK)	<0.011		0.011	0.0034	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Acetone	<0.045		0.045	0.020	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Benzene	<0.0045		0.0045	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Bromodichloromethane	<0.0045		0.0045	0.00092	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Bromoform	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Bromomethane	<0.011	*	0.011	0.0043	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Carbon disulfide	<0.011		0.011	0.0024	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Carbon tetrachloride	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Chlorobenzene	<0.0045		0.0045	0.0017	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Chloroethane	<0.011		0.011	0.0034	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Chloroform	<0.0045		0.0045	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Chloromethane	<0.011		0.011	0.0046	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
cis-1,2-Dichloroethene	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Dibromochloromethane	<0.0045		0.0045	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Ethylbenzene	<0.0045		0.0045	0.0022	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Methyl tert-butyl ether	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Methylene Chloride	<0.011		0.011	0.0045	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Styrene	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Tetrachloroethene	<0.0045		0.0045	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Toluene	<0.0045		0.0045	0.0011	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
trans-1,2-Dichloroethene	<0.0045		0.0045	0.0020	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Trichloroethene	<0.0045		0.0045	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Vinyl chloride	<0.0045		0.0045	0.0020	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1
Xylenes, Total	<0.0091		0.0091	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	05/31/18 18:29	06/05/18 21:01	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/05/18 21:01	1
Dibromofluoromethane	85		75 - 126	05/31/18 18:29	06/05/18 21:01	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/05/18 21:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B15

Lab Sample ID: 500-146240-17

Date Collected: 05/31/18 11:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Benzo[a]anthracene	0.0049	J	0.036	0.0049	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Benzo[g,h,i]perylene	0.017	J	0.036	0.012	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Chrysene	0.022	J	0.036	0.010	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B15

Lab Sample ID: 500-146240-17

Date Collected: 05/31/18 11:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Phenanthrene	0.023	J	0.036	0.0051	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Pyrene	0.014	J	0.036	0.0073	mg/Kg	☼	06/04/18 07:29	06/07/18 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	58		25 - 139				06/04/18 07:29	06/07/18 14:20	1
2-Fluorobiphenyl	75		44 - 121				06/04/18 07:29	06/07/18 14:20	1
2-Fluorophenol	92		46 - 133				06/04/18 07:29	06/07/18 14:20	1
Nitrobenzene-d5	67		41 - 120				06/04/18 07:29	06/07/18 14:20	1
Phenol-d5	83		46 - 125				06/04/18 07:29	06/07/18 14:20	1
Terphenyl-d14	93		35 - 160				06/04/18 07:29	06/07/18 14:20	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	☼	06/01/18 15:45	06/04/18 21:53	1
Arsenic	12		0.56	0.19	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Barium	48		0.56	0.064	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Beryllium	0.53		0.23	0.053	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Boron	9.4		2.8	0.26	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Cadmium	0.37	B	0.11	0.020	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Calcium	84000	B	110	19	mg/Kg	☼	06/01/18 15:45	06/05/18 14:42	10
Chromium	11		0.56	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Cobalt	14		0.28	0.074	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Copper	23		0.56	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Iron	21000		11	5.9	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Lead	13		0.28	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Magnesium	29000		5.6	2.8	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Manganese	700		0.56	0.082	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Nickel	32		0.56	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Potassium	1700		28	10	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Selenium	1.3		0.56	0.33	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Silver	0.20	J	0.28	0.073	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Sodium	970		56	8.3	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Vanadium	15		0.28	0.067	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1
Zinc	68		1.1	0.49	mg/Kg	☼	06/01/18 15:45	06/04/18 21:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 18:06	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 18:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 18:06	1
Boron	0.079	J	0.10	0.050	mg/L		06/05/18 15:59	06/06/18 18:06	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B15

Lab Sample ID: 500-146240-17

Date Collected: 05/31/18 11:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 18:06	1
Calcium	11		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:06	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:06	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:06	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 18:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 18:06	1
Manganese	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:06	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:06	1
Potassium	<2.5		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:06	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 18:06	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:06	1
Zinc	0.030	J B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 18:06	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:43	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.017	0.0057	mg/Kg	☼	06/04/18 15:05	06/05/18 18:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	06/07/18 18:15	06/08/18 15:19	1
pH	8.0		0.20	0.20	SU			06/06/18 14:24	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B16

Lab Sample ID: 500-146240-18

Date Collected: 05/31/18 11:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/31/18 18:29	06/05/18 21:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	05/31/18 18:29	06/05/18 21:28	1
4-Bromofluorobenzene (Surr)	127		75 - 131	05/31/18 18:29	06/05/18 21:28	1
Dibromofluoromethane	85		75 - 126	05/31/18 18:29	06/05/18 21:28	1
Toluene-d8 (Surr)	102		75 - 124	05/31/18 18:29	06/05/18 21:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B16

Lab Sample ID: 500-146240-18

Date Collected: 05/31/18 11:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2-Methylnaphthalene	0.043	J	0.079	0.0072	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Benzo[b]fluoranthene	0.011	J	0.039	0.0084	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Chrysene	0.022	J	0.039	0.011	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Fluorene	0.0056	J	0.039	0.0055	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B16

Lab Sample ID: 500-146240-18

Date Collected: 05/31/18 11:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Naphthalene	0.011	J	0.039	0.0060	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Pentachlorophenol	<0.79		0.79	0.62	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Phenanthrene	0.061		0.039	0.0054	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Pyrene	0.019	J	0.039	0.0077	mg/Kg	☼	06/04/18 07:29	06/07/18 14:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	50		25 - 139				06/04/18 07:29	06/07/18 14:48	1
2-Fluorobiphenyl	65		44 - 121				06/04/18 07:29	06/07/18 14:48	1
2-Fluorophenol	76		46 - 133				06/04/18 07:29	06/07/18 14:48	1
Nitrobenzene-d5	58		41 - 120				06/04/18 07:29	06/07/18 14:48	1
Phenol-d5	49		46 - 125				06/04/18 07:29	06/07/18 14:48	1
Terphenyl-d14	77		35 - 160				06/04/18 07:29	06/07/18 14:48	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	☼	06/01/18 15:45	06/04/18 22:05	1
Arsenic	5.0		0.56	0.19	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Barium	36		0.56	0.064	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Beryllium	0.68		0.23	0.053	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Boron	14		2.8	0.26	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Cadmium	0.24	B	0.11	0.020	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Calcium	68000	B	110	19	mg/Kg	☼	06/01/18 15:45	06/05/18 14:46	10
Chromium	16		0.56	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Cobalt	14		0.28	0.074	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Copper	21		0.56	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Iron	19000		11	5.9	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Lead	13		0.28	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Magnesium	22000		5.6	2.8	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Manganese	380		0.56	0.082	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Nickel	35		0.56	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Potassium	2600		28	10	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Selenium	0.48	J	0.56	0.33	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Silver	0.19	J	0.28	0.073	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Sodium	910		56	8.4	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Vanadium	17		0.28	0.067	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1
Zinc	60		1.1	0.50	mg/Kg	☼	06/01/18 15:45	06/04/18 22:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 18:10	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 18:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 18:10	1
Boron	0.19		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 18:10	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B16

Lab Sample ID: 500-146240-18

Date Collected: 05/31/18 11:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 18:10	1
Calcium	25		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:10	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:10	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:10	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 18:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 18:10	1
Manganese	0.012	J	0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:10	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:10	1
Potassium	1.6	J	2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:10	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 18:10	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:10	1
Zinc	0.020	J B	0.50	0.020	mg/L		06/05/18 15:59	06/06/18 18:10	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:47	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0062	mg/Kg	☼	06/04/18 15:05	06/05/18 18:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/08/18 13:50	06/09/18 16:26	1
pH	8.0		0.20	0.20	SU			06/06/18 14:27	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B17

Lab Sample ID: 500-146240-19

Date Collected: 05/31/18 12:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Acetone	0.013	J	0.015	0.0066	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Bromomethane	<0.0038	*	0.0038	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/31/18 18:29	06/06/18 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	05/31/18 18:29	06/06/18 00:23	1
4-Bromofluorobenzene (Surr)	122		75 - 131	05/31/18 18:29	06/06/18 00:23	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/06/18 00:23	1
Toluene-d8 (Surr)	101		75 - 124	05/31/18 18:29	06/06/18 00:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B17

Lab Sample ID: 500-146240-19

Date Collected: 05/31/18 12:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Benzo[a]anthracene	0.0068	J	0.038	0.0051	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Benzo[a]pyrene	0.0094	J	0.038	0.0074	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Chrysene	0.017	J	0.038	0.010	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Fluoranthene	0.0076	J	0.038	0.0071	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B17

Lab Sample ID: 500-146240-19

Date Collected: 05/31/18 12:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Phenanthrene	0.013	J	0.038	0.0053	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Pyrene	0.016	J	0.038	0.0076	mg/Kg	☼	06/04/18 07:29	06/07/18 15:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	63		25 - 139				06/04/18 07:29	06/07/18 15:17	1
2-Fluorobiphenyl	82		44 - 121				06/04/18 07:29	06/07/18 15:17	1
2-Fluorophenol	101		46 - 133				06/04/18 07:29	06/07/18 15:17	1
Nitrobenzene-d5	76		41 - 120				06/04/18 07:29	06/07/18 15:17	1
Phenol-d5	51		46 - 125				06/04/18 07:29	06/07/18 15:17	1
Terphenyl-d14	99		35 - 160				06/04/18 07:29	06/07/18 15:17	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	☼	06/01/18 15:45	06/04/18 22:09	1
Arsenic	7.9		0.55	0.19	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Barium	56		0.55	0.063	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Beryllium	0.68		0.22	0.052	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Boron	9.4		2.8	0.26	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Cadmium	0.32	B	0.11	0.020	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Calcium	83000	B	110	19	mg/Kg	☼	06/01/18 15:45	06/05/18 14:50	10
Chromium	12		0.55	0.27	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Cobalt	11		0.28	0.073	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Copper	20		0.55	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Iron	20000		11	5.8	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Lead	14		0.28	0.13	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Magnesium	23000		5.5	2.7	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Manganese	480		0.55	0.080	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Nickel	26		0.55	0.16	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Potassium	1600		28	9.8	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Selenium	0.46	J	0.55	0.33	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Silver	0.13	J	0.28	0.071	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Sodium	650		55	8.2	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Vanadium	17		0.28	0.065	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1
Zinc	66		1.1	0.49	mg/Kg	☼	06/01/18 15:45	06/04/18 22:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 18:15	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 18:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 18:15	1
Boron	0.073	J	0.10	0.050	mg/L		06/05/18 15:59	06/06/18 18:15	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B17

Lab Sample ID: 500-146240-19

Date Collected: 05/31/18 12:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 18:15	1
Calcium	19		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:15	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:15	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:15	1
Iron	0.50		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 18:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 18:15	1
Manganese	0.018	J	0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:15	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:15	1
Potassium	1.2	J	2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:15	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 18:15	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:15	1
Zinc	<0.50		0.50	0.020	mg/L		06/05/18 15:59	06/06/18 18:15	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 15:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 15:52	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.017	0.0057	mg/Kg	☼	06/04/18 15:05	06/05/18 19:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	06/08/18 13:50	06/09/18 16:27	1
pH	8.1		0.20	0.20	SU			06/06/18 14:29	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B18

Lab Sample ID: 500-146240-20

Date Collected: 05/31/18 12:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Acetone	0.011	J	0.020	0.0086	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Bromomethane	<0.0049	*	0.0049	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1
Xylenes, Total	<0.0040		0.0040	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 00:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 134	05/31/18 18:29	06/06/18 00:49	1
4-Bromofluorobenzene (Surr)	113		75 - 131	05/31/18 18:29	06/06/18 00:49	1
Dibromofluoromethane	82		75 - 126	05/31/18 18:29	06/06/18 00:49	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/06/18 00:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B18

Lab Sample ID: 500-146240-20

Date Collected: 05/31/18 12:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2-Methylnaphthalene	0.014	J	0.071	0.0065	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Benzo[a]anthracene	0.0063	J	0.035	0.0047	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Benzo[a]pyrene	<0.035		0.035	0.0068	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Benzo[b]fluoranthene	<0.035		0.035	0.0076	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Chrysene	0.017	J	0.035	0.0096	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Fluoranthene	0.0086	J	0.035	0.0065	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B18

Lab Sample ID: 500-146240-20

Date Collected: 05/31/18 12:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0091	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Phenanthrene	0.020	J	0.035	0.0049	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Phenol	<0.18		0.18	0.078	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Pyrene	0.020	J	0.035	0.0070	mg/Kg	☼	06/04/18 07:29	06/05/18 19:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	98		25 - 139				06/04/18 07:29	06/05/18 19:15	1
2-Fluorobiphenyl	90		44 - 121				06/04/18 07:29	06/05/18 19:15	1
2-Fluorophenol	119		46 - 133				06/04/18 07:29	06/05/18 19:15	1
Nitrobenzene-d5	85		41 - 120				06/04/18 07:29	06/05/18 19:15	1
Phenol-d5	112		46 - 125				06/04/18 07:29	06/05/18 19:15	1
Terphenyl-d14	102		35 - 160				06/04/18 07:29	06/05/18 19:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Arsenic	6.0		0.51	0.18	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Barium	100		0.51	0.059	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Beryllium	1.3		0.21	0.048	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Boron	14		2.6	0.24	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Cadmium	0.22	B	0.10	0.018	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Calcium	110000	B	100	17	mg/Kg	☼	06/01/18 15:45	06/05/18 14:54	10
Chromium	8.7		0.51	0.25	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Cobalt	6.1		0.26	0.067	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Copper	14		0.51	0.14	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Iron	12000		10	5.3	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Lead	9.3		0.26	0.12	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Magnesium	49000		51	25	mg/Kg	☼	06/01/18 15:45	06/05/18 14:54	10
Manganese	2500		5.1	0.74	mg/Kg	☼	06/01/18 15:45	06/05/18 14:54	10
Nickel	15		0.51	0.15	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Potassium	1200		26	9.1	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Selenium	0.72		0.51	0.30	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Silver	0.32		0.26	0.066	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Sodium	950		51	7.6	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Thallium	<0.51		0.51	0.26	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Vanadium	13		0.26	0.061	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1
Zinc	51		1.0	0.45	mg/Kg	☼	06/01/18 15:45	06/04/18 22:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 18:28	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 18:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 18:28	1
Boron	0.14		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 18:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B18

Lab Sample ID: 500-146240-20

Date Collected: 05/31/18 12:30

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 18:28	1
Calcium	45		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:28	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:28	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:28	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 18:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 18:28	1
Manganese	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:28	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:28	1
Potassium	0.53	J	2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:28	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 18:28	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:28	1
Zinc	<0.50		0.50	0.020	mg/L		06/05/18 15:59	06/06/18 18:28	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 16:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 16:04	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.017	0.0057	mg/Kg	☼	06/04/18 15:05	06/05/18 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	06/08/18 13:50	06/09/18 16:28	1
pH	7.6		0.20	0.20	SU			06/06/18 14:35	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B19

Lab Sample ID: 500-146240-21

Date Collected: 05/31/18 13:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Acetone	0.014	J	0.018	0.0079	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Bromomethane	<0.0045	*	0.0045	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 01:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	05/31/18 18:29	06/06/18 01:16	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/06/18 01:16	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/06/18 01:16	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/06/18 01:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B19

Lab Sample ID: 500-146240-21

Date Collected: 05/31/18 13:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.077	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2,4-Dinitrophenol	<0.68		0.68	0.60	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2-Methylnaphthalene	<0.068		0.068	0.0062	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2-Methylphenol	<0.17		0.17	0.054	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
2-Nitrophenol	<0.34		0.34	0.080	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
4,6-Dinitro-2-methylphenol	<0.68		0.68	0.27	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
4-Chloroaniline	<0.68		0.68	0.16	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
4-Nitrophenol	<0.68		0.68	0.32	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Anthracene	0.0060	J	0.034	0.0057	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Benzo[a]anthracene	0.036		0.034	0.0046	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Benzo[a]pyrene	0.043		0.034	0.0066	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Benzo[b]fluoranthene	0.069		0.034	0.0073	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Benzo[g,h,i]perylene	0.019	J	0.034	0.011	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Benzo[k]fluoranthene	0.024	J	0.034	0.010	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Bis(2-ethylhexyl) phthalate	0.086	J	0.17	0.062	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Chrysene	0.042		0.034	0.0092	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Dibenz(a,h)anthracene	0.0099	J	0.034	0.0066	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Diethyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Di-n-octyl phthalate	<0.17		0.17	0.055	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Fluoranthene	0.073		0.034	0.0063	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Hexachlorobenzene	<0.068		0.068	0.0079	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Hexachlorocyclopentadiene	<0.68		0.68	0.19	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B19

Lab Sample ID: 500-146240-21

Date Collected: 05/31/18 13:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.023	J	0.034	0.0088	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Naphthalene	<0.034		0.034	0.0052	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
N-Nitrosodi-n-propylamine	<0.068		0.068	0.041	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Pentachlorophenol	<0.68		0.68	0.54	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Phenanthrene	0.030	J	0.034	0.0047	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Phenol	<0.17		0.17	0.075	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Pyrene	0.064		0.034	0.0067	mg/Kg	☼	06/02/18 22:57	06/05/18 19:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	57		25 - 139				06/02/18 22:57	06/05/18 19:42	1
2-Fluorobiphenyl	76		44 - 121				06/02/18 22:57	06/05/18 19:42	1
2-Fluorophenol	109		46 - 133				06/02/18 22:57	06/05/18 19:42	1
Nitrobenzene-d5	73		41 - 120				06/02/18 22:57	06/05/18 19:42	1
Phenol-d5	89		46 - 125				06/02/18 22:57	06/05/18 19:42	1
Terphenyl-d14	93		35 - 160				06/02/18 22:57	06/05/18 19:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Arsenic	3.8		0.51	0.17	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Barium	42		0.51	0.058	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Beryllium	0.37		0.20	0.048	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Boron	6.5		2.5	0.24	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Cadmium	0.32	B	0.10	0.018	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Calcium	150000	B	100	17	mg/Kg	☼	06/01/18 15:45	06/05/18 14:58	10
Chromium	10		0.51	0.25	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Cobalt	3.9		0.25	0.067	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Copper	13		0.51	0.14	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Iron	10000		10	5.3	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Lead	68		0.25	0.12	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Magnesium	88000		51	25	mg/Kg	☼	06/01/18 15:45	06/05/18 14:58	10
Manganese	370		0.51	0.074	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Nickel	8.8		0.51	0.15	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Potassium	820		25	9.0	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Selenium	<0.51		0.51	0.30	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Silver	<0.25		0.25	0.066	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Sodium	360		51	7.5	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Vanadium	11		0.25	0.060	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1
Zinc	57		1.0	0.45	mg/Kg	☼	06/01/18 15:45	06/04/18 22:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:43	06/06/18 20:19	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B19

Lab Sample ID: 500-146240-21

Date Collected: 05/31/18 13:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 15:59	06/06/18 18:32	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 15:59	06/06/18 18:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 15:59	06/06/18 18:32	1
Boron	<0.10		0.10	0.050	mg/L		06/05/18 15:59	06/06/18 18:32	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 15:59	06/06/18 18:32	1
Calcium	11		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:32	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:32	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:32	1
Iron	4.7		0.40	0.20	mg/L		06/05/18 15:59	06/06/18 18:32	1
Lead	0.0093		0.0075	0.0075	mg/L		06/05/18 15:59	06/06/18 18:32	1
Manganese	0.037		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:32	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:32	1
Potassium	1.8 J		2.5	0.50	mg/L		06/05/18 15:59	06/06/18 18:32	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 15:59	06/06/18 18:32	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 15:59	06/06/18 18:32	1
Zinc	0.045 J B		0.50	0.020	mg/L		06/05/18 15:59	06/06/18 18:32	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 15:59	06/06/18 16:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 15:59	06/06/18 16:08	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013 J		0.017	0.0055	mg/Kg	☼	06/04/18 15:05	06/05/18 19:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.17	mg/Kg	☼	06/08/18 13:50	06/09/18 16:28	1
pH	8.0		0.20	0.20	SU			06/06/18 14:37	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20

Lab Sample ID: 500-146240-22

Date Collected: 05/31/18 13:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0031		0.0031	0.0010	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
1,1,2,2-Tetrachloroethane	<0.0031		0.0031	0.0010	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
1,1,2-Trichloroethane	<0.0031		0.0031	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
1,1-Dichloroethane	<0.0031		0.0031	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
1,1-Dichloroethene	<0.0031		0.0031	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
1,2-Dichloroethane	<0.0078		0.0078	0.0024	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
1,2-Dichloropropane	<0.0031		0.0031	0.00081	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
1,3-Dichloropropene, Total	<0.0031		0.0031	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
2-Butanone (MEK)	<0.0078		0.0078	0.0035	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
2-Hexanone	<0.0078		0.0078	0.0024	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
4-Methyl-2-pentanone (MIBK)	<0.0078		0.0078	0.0023	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Acetone	0.040		0.031	0.014	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Benzene	<0.0031		0.0031	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Bromodichloromethane	<0.0031		0.0031	0.00064	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Bromoform	<0.0031		0.0031	0.00091	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Bromomethane	<0.0078 *		0.0078	0.0030	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Carbon disulfide	<0.0078		0.0078	0.0016	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Carbon tetrachloride	<0.0031		0.0031	0.00091	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Chlorobenzene	<0.0031		0.0031	0.0012	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Chloroethane	<0.0078		0.0078	0.0023	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Chloroform	<0.0031		0.0031	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Chloromethane	<0.0078		0.0078	0.0031	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
cis-1,2-Dichloroethene	<0.0031		0.0031	0.00087	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
cis-1,3-Dichloropropene	<0.0031		0.0031	0.00094	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Dibromochloromethane	<0.0031		0.0031	0.0010	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Ethylbenzene	<0.0031		0.0031	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Methyl tert-butyl ether	<0.0031		0.0031	0.00092	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Methylene Chloride	<0.0078		0.0078	0.0031	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Styrene	<0.0031		0.0031	0.00094	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Tetrachloroethene	<0.0031		0.0031	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Toluene	<0.0031		0.0031	0.00079	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
trans-1,2-Dichloroethene	<0.0031		0.0031	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
trans-1,3-Dichloropropene	<0.0031		0.0031	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Trichloroethene	<0.0031		0.0031	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Vinyl chloride	<0.0031		0.0031	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1
Xylenes, Total	<0.0063		0.0063	0.0010	mg/Kg	☼	05/31/18 18:29	06/06/18 01:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	05/31/18 18:29	06/06/18 01:42	1
4-Bromofluorobenzene (Surr)	107		75 - 131	05/31/18 18:29	06/06/18 01:42	1
Dibromofluoromethane	82		75 - 126	05/31/18 18:29	06/06/18 01:42	1
Toluene-d8 (Surr)	95		75 - 124	05/31/18 18:29	06/06/18 01:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20

Lab Sample ID: 500-146240-22

Date Collected: 05/31/18 13:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Anthracene	0.0063	J	0.035	0.0059	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Benzo[a]anthracene	0.045		0.035	0.0048	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Benzo[a]pyrene	0.050		0.035	0.0069	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Benzo[b]fluoranthene	0.080		0.035	0.0077	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Benzo[g,h,i]perylene	0.027	J	0.035	0.011	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Benzo[k]fluoranthene	0.032	J	0.035	0.010	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Chrysene	0.058		0.035	0.0097	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Dibenz(a,h)anthracene	0.011	J	0.035	0.0069	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Fluoranthene	0.098		0.035	0.0066	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20

Lab Sample ID: 500-146240-22

Date Collected: 05/31/18 13:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.029	J	0.035	0.0092	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Phenanthrene	0.048		0.035	0.0049	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Pyrene	0.084		0.035	0.0070	mg/Kg	☼	06/02/18 22:57	06/05/18 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	81		25 - 139				06/02/18 22:57	06/05/18 17:57	1
2-Fluorobiphenyl	76		44 - 121				06/02/18 22:57	06/05/18 17:57	1
2-Fluorophenol	99		46 - 133				06/02/18 22:57	06/05/18 17:57	1
Nitrobenzene-d5	77		41 - 120				06/02/18 22:57	06/05/18 17:57	1
Phenol-d5	109		46 - 125				06/02/18 22:57	06/05/18 17:57	1
Terphenyl-d14	89		35 - 160				06/02/18 22:57	06/05/18 17:57	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Arsenic	8.8		0.54	0.19	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Barium	80		0.54	0.062	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Beryllium	0.67		0.22	0.051	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Boron	6.8		2.7	0.25	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Cadmium	0.34	B	0.11	0.020	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Calcium	48000	B	110	18	mg/Kg	☼	06/01/18 08:20	06/04/18 14:27	10
Chromium	13		0.54	0.27	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Cobalt	9.4		0.27	0.071	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Copper	16		0.54	0.15	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Iron	20000		11	5.6	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Lead	18		0.27	0.13	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Magnesium	22000		5.4	2.7	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Manganese	620		0.54	0.079	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Nickel	19		0.54	0.16	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Potassium	1500		27	9.6	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Selenium	0.69	B	0.54	0.32	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Silver	0.15	J	0.27	0.070	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Sodium	340		54	8.0	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Vanadium	23		0.27	0.064	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1
Zinc	66		1.1	0.48	mg/Kg	☼	06/01/18 08:20	06/01/18 18:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/05/18 14:42	06/06/18 11:49	1
Manganese	0.72		0.025	0.010	mg/L		06/05/18 14:42	06/06/18 11:49	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20

Lab Sample ID: 500-146240-22

Date Collected: 05/31/18 13:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 07:31	06/06/18 16:07	1
Barium	0.15	J	0.50	0.050	mg/L		06/06/18 07:31	06/06/18 16:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 07:31	06/06/18 16:07	1
Boron	0.061	J	0.10	0.050	mg/L		06/06/18 07:31	06/06/18 16:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 07:31	06/06/18 16:07	1
Calcium	13		2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:07	1
Chromium	0.035		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:07	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:07	1
Iron	30		0.40	0.20	mg/L		06/06/18 07:31	06/06/18 16:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 07:31	06/06/18 16:07	1
Manganese	0.33		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:07	1
Nickel	0.023	J	0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:07	1
Potassium	7.4		2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:07	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 07:31	06/06/18 16:07	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:07	1
Zinc	0.096	J B	0.50	0.020	mg/L		06/06/18 07:31	06/06/18 16:07	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 07:31	06/07/18 17:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 07:31	06/07/18 17:18	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.017	0.0057	mg/Kg	☼	06/04/18 15:05	06/05/18 19:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/08/18 13:50	06/09/18 16:28	1
pH	7.7		0.20	0.20	SU			06/06/18 14:40	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20 Dup

Lab Sample ID: 500-146240-23

Date Collected: 05/31/18 13:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00076	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
1,1-Dichloroethane	<0.0024		0.0024	0.00082	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
1,1-Dichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
1,2-Dichloroethane	<0.0060		0.0060	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
1,2-Dichloropropane	<0.0024		0.0024	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00084	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
2-Butanone (MEK)	<0.0060		0.0060	0.0027	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
2-Hexanone	<0.0060		0.0060	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
4-Methyl-2-pentanone (MIBK)	<0.0060		0.0060	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Acetone	0.015	J	0.024	0.010	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Benzene	<0.0024		0.0024	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Bromodichloromethane	<0.0024		0.0024	0.00049	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Bromoform	<0.0024		0.0024	0.00070	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Bromomethane	<0.0060	*	0.0060	0.0023	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Carbon disulfide	<0.0060		0.0060	0.0012	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Carbon tetrachloride	<0.0024		0.0024	0.00069	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Chlorobenzene	<0.0024		0.0024	0.00088	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Chloroethane	<0.0060		0.0060	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Chloroform	<0.0024		0.0024	0.00083	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Chloromethane	<0.0060		0.0060	0.0024	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00072	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Dibromochloromethane	<0.0024		0.0024	0.00078	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Ethylbenzene	<0.0024		0.0024	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00070	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Methylene Chloride	<0.0060		0.0060	0.0024	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Styrene	<0.0024		0.0024	0.00072	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Tetrachloroethene	<0.0024		0.0024	0.00081	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Toluene	<0.0024		0.0024	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00084	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Trichloroethene	<0.0024		0.0024	0.00081	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1
Xylenes, Total	<0.0048		0.0048	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	05/31/18 18:29	06/06/18 02:09	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/06/18 02:09	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/06/18 02:09	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/06/18 02:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20 Dup

Lab Sample ID: 500-146240-23

Date Collected: 05/31/18 13:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2,4-Dinitrophenol	<0.69		0.69	0.60	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
2-Nitrophenol	<0.34		0.34	0.081	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.28	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
4-Nitrophenol	<0.69		0.69	0.33	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Anthracene	0.012	J	0.034	0.0057	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Benzo[a]anthracene	0.061		0.034	0.0046	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Benzo[a]pyrene	0.073		0.034	0.0066	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Benzo[b]fluoranthene	0.13		0.034	0.0074	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Benzo[g,h,i]perylene	0.042		0.034	0.011	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Benzo[k]fluoranthene	0.042		0.034	0.010	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Carbazole	<0.17		0.17	0.086	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Chrysene	0.083		0.034	0.0094	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Dibenz(a,h)anthracene	0.015	J	0.034	0.0066	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Fluoranthene	0.14		0.034	0.0064	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Hexachlorobenzene	<0.069		0.069	0.0080	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20 Dup

Lab Sample ID: 500-146240-23

Date Collected: 05/31/18 13:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.040		0.034	0.0089	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
N-Nitrosodi-n-propylamine	<0.069		0.069	0.042	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Phenanthrene	0.064		0.034	0.0048	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Phenol	<0.17		0.17	0.076	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Pyrene	0.12		0.034	0.0068	mg/Kg	☼	06/02/18 22:57	06/05/18 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		25 - 139				06/02/18 22:57	06/05/18 18:23	1
2-Fluorobiphenyl	75		44 - 121				06/02/18 22:57	06/05/18 18:23	1
2-Fluorophenol	100		46 - 133				06/02/18 22:57	06/05/18 18:23	1
Nitrobenzene-d5	78		41 - 120				06/02/18 22:57	06/05/18 18:23	1
Phenol-d5	103		46 - 125				06/02/18 22:57	06/05/18 18:23	1
Terphenyl-d14	89		35 - 160				06/02/18 22:57	06/05/18 18:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Arsenic	7.7		0.54	0.18	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Barium	90		0.54	0.061	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Beryllium	0.67		0.21	0.050	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Boron	7.6		2.7	0.25	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Cadmium	0.34	B	0.11	0.019	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Calcium	29000	B	11	1.8	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Chromium	16		0.54	0.27	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Cobalt	8.8		0.27	0.070	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Copper	18		0.54	0.15	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Iron	19000		11	5.6	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Lead	23		0.27	0.12	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Magnesium	18000		5.4	2.7	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Manganese	600		0.54	0.078	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Nickel	18		0.54	0.16	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Potassium	1700		27	9.5	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Selenium	<0.54		0.54	0.31	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Silver	0.18	J	0.27	0.069	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Sodium	460		54	7.9	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Vanadium	25		0.27	0.063	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1
Zinc	82		1.1	0.47	mg/Kg	☼	06/01/18 08:20	06/01/18 18:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:42	06/06/18 11:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:42	06/06/18 11:53	1
Manganese	0.36		0.025	0.010	mg/L		06/05/18 14:42	06/06/18 11:53	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Client Sample ID: 1628V2-1-B20 Dup

Lab Sample ID: 500-146240-23

Date Collected: 05/31/18 13:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 07:31	06/06/18 16:11	1
Barium	0.18	J	0.50	0.050	mg/L		06/06/18 07:31	06/06/18 16:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 07:31	06/06/18 16:11	1
Boron	0.067	J	0.10	0.050	mg/L		06/06/18 07:31	06/06/18 16:11	1
Cadmium	0.0021	J	0.0050	0.0020	mg/L		06/06/18 07:31	06/06/18 16:11	1
Calcium	12		2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:11	1
Chromium	0.040		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:11	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:11	1
Iron	36		0.40	0.20	mg/L		06/06/18 07:31	06/06/18 16:11	1
Lead	0.0081		0.0075	0.0075	mg/L		06/06/18 07:31	06/06/18 16:11	1
Manganese	0.43		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:11	1
Nickel	0.027		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:11	1
Potassium	8.5		2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:11	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 07:31	06/06/18 16:11	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:11	1
Zinc	0.22	J B	0.50	0.020	mg/L		06/06/18 07:31	06/06/18 16:11	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 07:31	06/07/18 17:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 07:31	06/07/18 17:22	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 12:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.018	0.0060	mg/Kg	☼	06/04/18 15:05	06/05/18 19:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/08/18 13:50	06/09/18 16:29	1
pH	7.7		0.20	0.20	SU			06/06/18 14:43	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit
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.

General Chemistry

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146240-1

Laboratory: TestAmerica Chicago

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

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

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

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



CHAIN OF CUSTODY RECORD

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Laboratory Lab: Test America - Chicago	Project Name: <u>F-80 WILL COUNTY</u>	COC No.: <u>1</u> of <u>9</u>
	Address: 2417 Bond Street University Park, IL 60484	Project No.: <u>PTB 184-006/AC-7-06A</u>	Lab Job No.: <u>500-146240</u>
Phone: 708-534-5200	Contact: Dick Wright	TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>(FBI)</u>	Sample Temp: <u>(2.0)(2.4)(3.1)</u> <u>(3.6)(4.2)(3.0)(5.1)(4.0)</u>
email: richard.wright@testamericainc.com	email: <u>richard.wright@testamericainc.com</u>	Sampler: <u>CJP/cnm</u>	Matrix Key:

Special Instructions:
See Table 2 for complete parameter lists and minimum reporting limits.
* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
*** If total cyanide exceeds MAC Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES												
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	500-146240 COC

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other


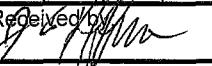


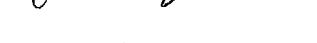

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	1628V2-1-B01	5/31	910	S	X	X					X	X	X	X	X		0-2 TBI
2	1628V2-1-B02		925														0-2 TBI
3	1628V2-1-B03		940														0-4 TBI
4	1628V2-1-B04		945														0-4 TBI
5	1628V2-1-B05		950														0-4 TBI
6	1628V2-1-B06		1000														0-7 TBI
7	1628V2-1-B07		1010														0-8 TBI
8	1628V2-1-B08		1015														0-7 TBI
9	1628V2-1-B09		1030														0-7 TBI
10	1628V2-1-B10		1045														0-7 TBI
11	1628V2-1-B10-DW		1040														0-7 TBI
12	Field Blank #1			S	X												

Relinquished by: <u>[Signature]</u>	Date/Time: <u>5/31/18 1600</u>	Received by: <u>[Signature]</u>	Date/Time: <u>5/31/18 1600</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>5/31/18 1655</u>	Received by: <u>[Signature]</u>	Date/Time: <u>05/31/18 1655</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name: <u>T-80 WILL COUNTY</u>	COC No.: <u>2</u> of <u>4</u>
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No. <u>PTB184006/AE7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>FBI</u>	Lab Job No.: <u>500-</u> <u>146240</u>
Special Instructions: See Table 2 for complete parameter lists and minimum reporting limits. * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal. ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter. *** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.			Sample Temp:
		Analyses	Matrix Key:

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES													Comments
					VOCS	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		
13	1628V2-1-B 11	5/31	1120	S	X	X						X	X	X	X	X		0-7 TB2
14	1628V2-1-B 12		1110															0-7 TB2
15	1628V2-1-B 13		1120															0-7 TD 2
16	1628V2-1-B 14		1130															0-8 TB2
17	1628V2-1-B 15		1140															0-8 TB2
18	1628V2-1-B 16		1150															0-8 TD2
19	1628V2-1-B 17		1225															0-8 TB3
20	1628V2-1-B 18		1230															0-2.5 TB3
21	1628V2-1-B 19		1300															0-4 TB3
22	1628V2-1-B 20		1305															0-3 TB3
23	1628V2-1-B 20-11		1310															0-3 TB3
24	Tip Blank #2			S	X													

Relinquished by: 	Date/Time: <u>5/31/18 1600</u>	Received by: 	Date/Time: <u>5/31/18 1600</u>
Relinquished by: 	Date/Time: <u>5/31/18 1655</u>	Received by: 	Date/Time: <u>05/31/18 1655</u>
Relinquished by: 	Date/Time: <u>5/31/18 1655</u>	Received by: 	Date/Time: <u>05/31/18 1655</u>

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: 500-146241-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/11/2018 5:18:55 PM

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

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

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

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Sample Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-146241-1	1628V2-1-B21	Solid	05/31/18 14:15	05/31/18 16:55
500-146241-2	1628V2-1-B22	Solid	05/31/18 14:25	05/31/18 16:55
500-146241-3	1628V2-1-B23	Solid	05/31/18 14:35	05/31/18 16:55
500-146241-4	1628V2-1-B24	Solid	05/31/18 14:40	05/31/18 16:55
500-146241-5	1628V2-1-B25	Solid	05/31/18 14:50	05/31/18 16:55
500-146241-6	1628V2-1-B26	Solid	05/31/18 15:00	05/31/18 16:55
500-146241-7	1628V2-1-B27	Solid	05/31/18 15:05	05/31/18 16:55
500-146241-8	1628V2-1-B28	Solid	05/31/18 15:10	05/31/18 16:55
500-146241-9	1628V2-1-B29	Solid	05/31/18 15:20	05/31/18 16:55
500-146241-10	Trip Blank #3	Solid	05/31/18 00:00	05/31/18 16:55
500-146241-11	1628V2-1-B68	Solid	05/31/18 10:30	05/31/18 16:55
500-146241-12	1628V2-1-B69	Solid	05/31/18 10:40	05/31/18 16:55
500-146241-13	1628V2-1-B70	Solid	05/31/18 10:50	05/31/18 16:55
500-146241-14	1628V2-1-B71	Solid	05/31/18 11:00	05/31/18 16:55
500-146241-15	1628V2-1-B72-1	Solid	05/31/18 11:15	05/31/18 16:55
500-146241-16	1628V2-1-B72-1 Dup	Solid	05/31/18 11:25	05/31/18 16:55
500-146241-17	1628V2-1-B72-2	Solid	05/31/18 11:35	05/31/18 16:55
500-146241-18	1628V2-1-B74-1	Solid	05/31/18 11:45	05/31/18 16:55
500-146241-19	1628V2-1-B74-2	Solid	05/31/18 11:55	05/31/18 16:55
500-146241-20	1628V2-1-B75	Solid	05/31/18 12:10	05/31/18 16:55
500-146241-21	1628V2-1-B76	Solid	05/31/18 12:35	05/31/18 16:55
500-146241-22	1628V2-1-B76 Dup	Solid	05/31/18 12:45	05/31/18 16:55
500-146241-23	Trip Blank #4	Solid	05/31/18 00:00	05/31/18 16:55

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B21

Lab Sample ID: 500-146241-1

Date Collected: 05/31/18 14:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Acetone	0.016	J	0.018	0.0077	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Bromomethane	<0.0044	*	0.0044	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Carbon disulfide	<0.0044		0.0044	0.00093	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Methylene Chloride	<0.0044		0.0044	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	05/31/18 18:29	06/06/18 03:01	1
4-Bromofluorobenzene (Surr)	110		75 - 131	05/31/18 18:29	06/06/18 03:01	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/06/18 03:01	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/06/18 03:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B21

Lab Sample ID: 500-146241-1

Date Collected: 05/31/18 14:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2,4-Dinitrophenol	<0.73	F2	0.73	0.63	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
3,3'-Dichlorobenzidine	<0.18	F1	0.18	0.050	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Benzo[a]anthracene	0.028	J	0.036	0.0048	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Benzo[a]pyrene	0.031	J	0.036	0.0070	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Benzo[b]fluoranthene	0.047		0.036	0.0078	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Benzo[g,h,i]perylene	0.023	J	0.036	0.012	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Benzo[k]fluoranthene	0.019	J	0.036	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Carbazole	0.11	J	0.18	0.090	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Chrysene	0.039		0.036	0.0098	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Fluoranthene	0.049		0.036	0.0067	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Hexachlorobenzene	<0.073		0.073	0.0083	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B21

Lab Sample ID: 500-146241-1

Date Collected: 05/31/18 14:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.020	J	0.036	0.0093	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Phenanthrene	0.020	J	0.036	0.0050	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Pyrene	0.046		0.036	0.0072	mg/Kg	☼	06/04/18 07:02	06/05/18 11:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		25 - 139				06/04/18 07:02	06/05/18 11:45	1
2-Fluorobiphenyl	95		44 - 121				06/04/18 07:02	06/05/18 11:45	1
2-Fluorophenol	113		46 - 133				06/04/18 07:02	06/05/18 11:45	1
Nitrobenzene-d5	90		41 - 120				06/04/18 07:02	06/05/18 11:45	1
Phenol-d5	112		46 - 125				06/04/18 07:02	06/05/18 11:45	1
Terphenyl-d14	116		35 - 160				06/04/18 07:02	06/05/18 11:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.21	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Arsenic	5.5	F1	0.54	0.18	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Barium	72		0.54	0.061	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Beryllium	0.51		0.21	0.050	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Boron	6.3	F1	2.7	0.25	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Cadmium	0.36		0.11	0.019	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Calcium	120000	B F2	110	18	mg/Kg	☼	06/01/18 15:49	06/05/18 13:36	10
Chromium	10		0.54	0.27	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Cobalt	8.3		0.27	0.070	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Copper	14		0.54	0.15	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Iron	13000		11	5.6	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Lead	22	F1 F2	0.27	0.12	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Magnesium	69000	B F2	54	27	mg/Kg	☼	06/01/18 15:49	06/05/18 13:36	10
Manganese	600	F2	0.54	0.078	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Nickel	15		0.54	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Potassium	1100	F1	27	9.5	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Silver	0.13	J	0.27	0.069	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Sodium	560		54	7.9	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Thallium	<0.54	F1	0.54	0.27	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Vanadium	17		0.27	0.063	mg/Kg	☼	06/01/18 15:49	06/04/18 22:31	1
Zinc	77		11	4.7	mg/Kg	☼	06/01/18 15:49	06/05/18 13:36	10

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 21:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 21:06	1
Manganese	0.047		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:06	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B21

Lab Sample ID: 500-146241-1

Date Collected: 05/31/18 14:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011	J	0.050	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Barium	0.26	J	0.50	0.050	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Boron	0.11		0.10	0.050	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Cadmium	0.0025	J	0.0050	0.0020	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Calcium	20		2.5	0.50	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Chromium	0.060		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Cobalt	0.012	J	0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Iron	55		0.40	0.20	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Lead	0.020		0.0075	0.0075	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Manganese	0.33		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Nickel	0.045		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Potassium	15		2.5	0.50	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Selenium	<0.050		0.050	0.020	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Silver	<0.025		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:02	1
Zinc	0.21	J B	0.50	0.020	mg/L	-	06/05/18 16:01	06/06/18 19:02	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	06/05/18 16:01	06/06/18 16:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	06/05/18 16:01	06/06/18 16:45	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	06/06/18 13:15	06/07/18 10:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.018	0.0059	mg/Kg	☼	06/04/18 15:05	06/05/18 16:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	06/08/18 13:50	06/09/18 16:21	1
pH	8.3		0.20	0.20	SU			06/06/18 14:48	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B22

Lab Sample ID: 500-146241-2

Date Collected: 05/31/18 14:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Acetone	0.018		0.017	0.0076	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Bromomethane	<0.0044	*	0.0044	0.0016	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 03:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 134	05/31/18 18:29	06/06/18 03:27	1
4-Bromofluorobenzene (Surr)	108		75 - 131	05/31/18 18:29	06/06/18 03:27	1
Dibromofluoromethane	81		75 - 126	05/31/18 18:29	06/06/18 03:27	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/06/18 03:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B22

Lab Sample ID: 500-146241-2

Date Collected: 05/31/18 14:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2,4-Dinitrophenol	<0.69		0.69	0.60	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
2-Nitrophenol	<0.34		0.34	0.080	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.27	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
4-Nitrophenol	<0.69		0.69	0.32	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Anthracene	<0.034		0.034	0.0057	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Benzo[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Benzo[a]pyrene	<0.034		0.034	0.0066	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Benzo[b]fluoranthene	<0.034		0.034	0.0073	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.062	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Chrysene	<0.034		0.034	0.0093	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0066	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Fluoranthene	<0.034		0.034	0.0063	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Hexachlorobenzene	<0.069		0.069	0.0079	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B22

Lab Sample ID: 500-146241-2

Date Collected: 05/31/18 14:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0088	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Naphthalene	<0.034		0.034	0.0052	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
N-Nitrosodi-n-propylamine	<0.069		0.069	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Phenanthrene	<0.034		0.034	0.0047	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Phenol	<0.17		0.17	0.076	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Pyrene	<0.034		0.034	0.0068	mg/Kg	☼	06/04/18 07:02	06/05/18 12:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	57		25 - 139				06/04/18 07:02	06/05/18 12:41	1
2-Fluorobiphenyl	98		44 - 121				06/04/18 07:02	06/05/18 12:41	1
2-Fluorophenol	122		46 - 133				06/04/18 07:02	06/05/18 12:41	1
Nitrobenzene-d5	94		41 - 120				06/04/18 07:02	06/05/18 12:41	1
Phenol-d5	107		46 - 125				06/04/18 07:02	06/05/18 12:41	1
Terphenyl-d14	119		35 - 160				06/04/18 07:02	06/05/18 12:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.0	0.20	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Arsenic	4.1		0.52	0.18	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Barium	12		0.52	0.059	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Beryllium	0.20	J	0.21	0.049	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Boron	7.3		2.6	0.24	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Cadmium	0.16		0.10	0.019	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Calcium	160000	B	100	18	mg/Kg	☼	06/01/18 15:49	06/05/18 13:56	10
Chromium	4.7		0.52	0.26	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Cobalt	3.0		0.26	0.068	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Copper	11		0.52	0.15	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Iron	8400		10	5.4	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Lead	6.1		0.26	0.12	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Magnesium	94000	B	52	26	mg/Kg	☼	06/01/18 15:49	06/05/18 13:56	10
Manganese	260		0.52	0.076	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Nickel	7.5		0.52	0.15	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Potassium	640		26	9.2	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Sodium	200		52	7.7	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Vanadium	8.5		0.26	0.062	mg/Kg	☼	06/01/18 15:49	06/04/18 23:01	1
Zinc	38		10	4.6	mg/Kg	☼	06/01/18 15:49	06/05/18 13:56	10

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/05/18 14:45	06/06/18 21:10	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B22

Lab Sample ID: 500-146241-2

Date Collected: 05/31/18 14:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:06	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:06	1
Boron	<0.10		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:06	1
Calcium	8.1		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:06	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:06	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:06	1
Iron	5.4		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:06	1
Manganese	0.034		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:06	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:06	1
Potassium	2.7		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:06	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:06	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:06	1
Zinc	0.034	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:06	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 16:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 16:49	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg	☼	06/04/18 15:05	06/05/18 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	06/08/18 13:50	06/09/18 16:21	1
pH	8.5		0.20	0.20	SU			06/06/18 14:51	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B23

Lab Sample ID: 500-146241-3

Date Collected: 05/31/18 14:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
2-Butanone (MEK)	0.0057		0.0046	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Acetone	0.051		0.018	0.0079	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Bromomethane	<0.0046 *		0.0046	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Chloroethane	<0.0046		0.0046	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 03:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	05/31/18 18:29	06/06/18 03:53	1
4-Bromofluorobenzene (Surr)	108		75 - 131	05/31/18 18:29	06/06/18 03:53	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/06/18 03:53	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/06/18 03:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B23

Lab Sample ID: 500-146241-3

Date Collected: 05/31/18 14:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Benzo[a]anthracene	0.025	J	0.039	0.0052	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Benzo[a]pyrene	0.032	J	0.039	0.0076	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Benzo[b]fluoranthene	0.045		0.039	0.0084	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Benzo[g,h,i]perylene	0.021	J	0.039	0.013	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Benzo[k]fluoranthene	0.011	J	0.039	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Carbazole	0.12	J	0.20	0.097	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Dibenz(a,h)anthracene	0.010	J	0.039	0.0075	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Fluoranthene	0.068		0.039	0.0072	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B23

Lab Sample ID: 500-146241-3

Date Collected: 05/31/18 14:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.017	J	0.039	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Phenanthrene	0.039		0.039	0.0054	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Pyrene	0.060		0.039	0.0078	mg/Kg	☼	06/04/18 07:02	06/06/18 13:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	45		25 - 139				06/04/18 07:02	06/06/18 13:15	1
2-Fluorobiphenyl	87		44 - 121				06/04/18 07:02	06/06/18 13:15	1
2-Fluorophenol	113		46 - 133				06/04/18 07:02	06/06/18 13:15	1
Nitrobenzene-d5	82		41 - 120				06/04/18 07:02	06/06/18 13:15	1
Phenol-d5	104		46 - 125				06/04/18 07:02	06/06/18 13:15	1
Terphenyl-d14	113		35 - 160				06/04/18 07:02	06/06/18 13:15	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	☼	06/01/18 15:49	06/04/18 23:05	1
Arsenic	10		0.57	0.20	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Barium	84		0.57	0.065	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Beryllium	0.70		0.23	0.053	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Boron	6.1		2.9	0.27	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Cadmium	0.45		0.11	0.021	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Calcium	26000	B	11	1.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Chromium	14		0.57	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Cobalt	11		0.29	0.075	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Copper	21		0.57	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Iron	23000		11	5.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Lead	21		0.29	0.13	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Magnesium	15000	B	5.7	2.8	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Manganese	580		0.57	0.083	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Nickel	27		0.57	0.17	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Potassium	1400		29	10	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Selenium	0.82		0.57	0.34	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Silver	0.21	J	0.29	0.074	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Sodium	340		57	8.5	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Thallium	0.29	J	0.57	0.29	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Vanadium	24		0.29	0.068	mg/Kg	☼	06/01/18 15:49	06/04/18 23:05	1
Zinc	83		1.1	0.50	mg/Kg	☼	06/01/18 15:49	06/05/18 14:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:14	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 21:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 21:14	1
Manganese	2.1		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:14	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B23

Lab Sample ID: 500-146241-3

Date Collected: 05/31/18 14:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.037	J	0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:18	1
Barium	0.46	J	0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:18	1
Boron	0.16		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:18	1
Cadmium	0.0033	J	0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:18	1
Calcium	23		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:18	1
Chromium	0.11		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:18	1
Cobalt	0.030		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:18	1
Iron	120		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:18	1
Lead	0.040		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:18	1
Manganese	0.64		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:18	1
Nickel	0.10		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:18	1
Potassium	27		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:18	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:18	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:18	1
Zinc	0.42	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:45	06/07/18 23:50	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 16:53	1
Thallium	0.0022		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 16:53	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00040		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.019	0.0064	mg/Kg	☼	06/04/18 15:05	06/05/18 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.16	mg/Kg	☼	06/11/18 11:05	06/11/18 15:46	1
pH	8.4		0.20	0.20	SU			06/06/18 14:54	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B24

Lab Sample ID: 500-146241-4

Date Collected: 05/31/18 14:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Acetone	0.017		0.017	0.0073	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 04:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	05/31/18 18:29	06/06/18 04:19	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/06/18 04:19	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/06/18 04:19	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/06/18 04:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B24

Lab Sample ID: 500-146241-4

Date Collected: 05/31/18 14:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2-Methylnaphthalene	<0.072		0.072	0.0065	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Benzo[a]anthracene	0.0057	J	0.035	0.0048	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Benzo[a]pyrene	<0.035		0.035	0.0069	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Benzo[b]fluoranthene	<0.035		0.035	0.0077	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Chrysene	<0.035		0.035	0.0097	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Fluoranthene	0.0076	J	0.035	0.0066	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B24

Lab Sample ID: 500-146241-4

Date Collected: 05/31/18 14:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Phenanthrene	<0.035		0.035	0.0050	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Pyrene	<0.035		0.035	0.0071	mg/Kg	☼	06/04/18 07:02	06/06/18 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	43		25 - 139				06/04/18 07:02	06/06/18 13:43	1
2-Fluorobiphenyl	97		44 - 121				06/04/18 07:02	06/06/18 13:43	1
2-Fluorophenol	115		46 - 133				06/04/18 07:02	06/06/18 13:43	1
Nitrobenzene-d5	90		41 - 120				06/04/18 07:02	06/06/18 13:43	1
Phenol-d5	77		46 - 125				06/04/18 07:02	06/06/18 13:43	1
Terphenyl-d14	116		35 - 160				06/04/18 07:02	06/06/18 13:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Arsenic	2.6		0.52	0.18	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Barium	16		0.52	0.060	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Beryllium	0.25		0.21	0.049	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Boron	6.0		2.6	0.24	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Cadmium	0.22		0.10	0.019	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Calcium	220000	B	100	18	mg/Kg	☼	06/01/18 15:49	06/05/18 14:04	10
Chromium	2.4		0.52	0.26	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Cobalt	3.6		0.26	0.069	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Copper	4.2		0.52	0.15	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Iron	17000		10	5.4	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Lead	5.7		0.26	0.12	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Magnesium	130000	B	52	26	mg/Kg	☼	06/01/18 15:49	06/05/18 14:04	10
Manganese	280		0.52	0.076	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Nickel	9.8		0.52	0.15	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Potassium	600		26	9.3	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Sodium	280		52	7.7	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Thallium	0.29	J	0.52	0.26	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Vanadium	4.6		0.26	0.062	mg/Kg	☼	06/01/18 15:49	06/04/18 23:09	1
Zinc	110		10	4.6	mg/Kg	☼	06/01/18 15:49	06/05/18 14:04	10

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/05/18 14:45	06/06/18 21:18	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B24

Lab Sample ID: 500-146241-4

Date Collected: 05/31/18 14:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:22	1
Barium	0.067	J	0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:22	1
Boron	<0.10		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:22	1
Calcium	12		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:22	1
Chromium	0.016	J	0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:22	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:22	1
Iron	14		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:22	1
Manganese	0.097		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:22	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:22	1
Potassium	4.0		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:22	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:22	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:22	1
Zinc	0.17	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:22	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 16:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 16:57	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 10:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.017	0.0058	mg/Kg	☼	06/04/18 15:05	06/05/18 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.16	mg/Kg	☼	06/11/18 11:05	06/11/18 15:48	1
pH	7.8		0.20	0.20	SU			06/06/18 14:57	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B25

Lab Sample ID: 500-146241-5

Date Collected: 05/31/18 14:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Bromomethane	<0.0045 *		0.0045	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 04:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 134	05/31/18 18:29	06/06/18 04:45	1
4-Bromofluorobenzene (Surr)	111		75 - 131	05/31/18 18:29	06/06/18 04:45	1
Dibromofluoromethane	81		75 - 126	05/31/18 18:29	06/06/18 04:45	1
Toluene-d8 (Surr)	96		75 - 124	05/31/18 18:29	06/06/18 04:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B25

Lab Sample ID: 500-146241-5

Date Collected: 05/31/18 14:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Anthracene	0.0072	J	0.040	0.0067	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Benzo[a]anthracene	0.036	J	0.040	0.0054	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Benzo[a]pyrene	0.055		0.040	0.0077	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Benzo[b]fluoranthene	0.073		0.040	0.0086	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Benzo[g,h,i]perylene	0.029	J	0.040	0.013	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Benzo[k]fluoranthene	0.024	J	0.040	0.012	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Carbazole	0.13	J	0.20	0.10	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Chrysene	0.051		0.040	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Dibenz(a,h)anthracene	0.0094	J	0.040	0.0077	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Fluoranthene	0.066		0.040	0.0074	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B25

Lab Sample ID: 500-146241-5

Date Collected: 05/31/18 14:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.026	J	0.040	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Phenanthrene	0.033	J	0.040	0.0056	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Pyrene	0.062		0.040	0.0079	mg/Kg	☼	06/04/18 07:02	06/06/18 17:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	43		25 - 139				06/04/18 07:02	06/06/18 17:00	1
2-Fluorobiphenyl	94		44 - 121				06/04/18 07:02	06/06/18 17:00	1
2-Fluorophenol	117		46 - 133				06/04/18 07:02	06/06/18 17:00	1
Nitrobenzene-d5	84		41 - 120				06/04/18 07:02	06/06/18 17:00	1
Phenol-d5	106		46 - 125				06/04/18 07:02	06/06/18 17:00	1
Terphenyl-d14	116		35 - 160				06/04/18 07:02	06/06/18 17:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Arsenic	7.4		0.59	0.20	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Barium	75		0.59	0.067	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Beryllium	0.60		0.24	0.055	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Boron	5.4		2.9	0.27	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Cadmium	0.40		0.12	0.021	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Calcium	63000	B	120	20	mg/Kg	☼	06/01/18 15:49	06/05/18 14:08	10
Chromium	15		0.59	0.29	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Cobalt	8.5		0.29	0.077	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Copper	21		0.59	0.17	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Iron	17000		12	6.1	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Lead	44		0.29	0.14	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Magnesium	23000	B	5.9	2.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Manganese	540		0.59	0.085	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Nickel	20		0.59	0.17	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Potassium	1300		29	10	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Selenium	0.83		0.59	0.35	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Silver	0.19	J	0.29	0.076	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Sodium	530		59	8.7	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Vanadium	22		0.29	0.070	mg/Kg	☼	06/01/18 15:49	06/04/18 23:13	1
Zinc	98		12	5.2	mg/Kg	☼	06/01/18 15:49	06/05/18 14:08	10

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:45	06/06/18 21:23	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:23	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 21:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 21:23	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B25

Lab Sample ID: 500-146241-5

Date Collected: 05/31/18 14:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.050		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:23	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.047	J	0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:26	1
Barium	0.66		0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:26	1
Beryllium	0.0054		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:26	1
Boron	0.12		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:26	1
Cadmium	0.0027	J	0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:26	1
Calcium	24		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:26	1
Chromium	0.15		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:26	1
Cobalt	0.035		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:26	1
Iron	160		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:26	1
Lead	0.11		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:26	1
Manganese	1.4		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:26	1
Nickel	0.13		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:26	1
Potassium	21		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:26	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:26	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:26	1
Zinc	0.68	B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:45	06/07/18 23:54	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:01	1
Thallium	0.0026		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:01	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00042		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.018	0.0060	mg/Kg	☼	06/04/18 15:05	06/05/18 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	06/11/18 11:05	06/11/18 15:48	1
pH	8.5		0.20	0.20	SU			06/06/18 14:59	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B26

Lab Sample ID: 500-146241-6

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Bromomethane	<0.0045	*	0.0045	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	05/31/18 18:29	06/06/18 05:11	1
4-Bromofluorobenzene (Surr)	108		75 - 131	05/31/18 18:29	06/06/18 05:11	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/06/18 05:11	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/06/18 05:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B26

Lab Sample ID: 500-146241-6

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
4-Nitroaniline	<0.34		0.34	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Acenaphthylene	<0.034		0.034	0.0046	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Anthracene	<0.034		0.034	0.0058	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Benzo[a]anthracene	0.031	J	0.034	0.0047	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Benzo[a]pyrene	0.033	J	0.034	0.0067	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Benzo[b]fluoranthene	0.047		0.034	0.0075	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Benzo[g,h,i]perylene	0.015	J	0.034	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Benzo[k]fluoranthene	0.016	J	0.034	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Carbazole	0.10	J	0.17	0.087	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Chrysene	0.035		0.034	0.0095	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Fluoranthene	0.061		0.034	0.0064	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Fluorene	<0.034		0.034	0.0049	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B26

Lab Sample ID: 500-146241-6

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.013	J	0.034	0.0090	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Nitrobenzene	<0.034		0.034	0.0087	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Phenanthrene	0.033	J	0.034	0.0048	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Pyrene	0.053		0.034	0.0069	mg/Kg	☼	06/04/18 07:02	06/06/18 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	48		25 - 139				06/04/18 07:02	06/06/18 17:29	1
2-Fluorobiphenyl	96		44 - 121				06/04/18 07:02	06/06/18 17:29	1
2-Fluorophenol	116		46 - 133				06/04/18 07:02	06/06/18 17:29	1
Nitrobenzene-d5	87		41 - 120				06/04/18 07:02	06/06/18 17:29	1
Phenol-d5	59		46 - 125				06/04/18 07:02	06/06/18 17:29	1
Terphenyl-d14	119		35 - 160				06/04/18 07:02	06/06/18 17:29	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Arsenic	7.6		0.52	0.18	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Barium	53		0.52	0.059	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Beryllium	0.65		0.21	0.048	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Boron	8.8		2.6	0.24	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Cadmium	0.31		0.10	0.019	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Calcium	75000	B	100	18	mg/Kg	☼	06/01/18 15:49	06/05/18 14:12	10
Chromium	14		0.52	0.26	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Cobalt	11		0.26	0.068	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Copper	22		0.52	0.14	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Iron	19000		10	5.4	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Lead	22		0.26	0.12	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Magnesium	26000	B	5.2	2.6	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Manganese	430		0.52	0.075	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Nickel	27		0.52	0.15	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Potassium	1900		26	9.1	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Selenium	0.63		0.52	0.30	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Silver	0.17	J	0.26	0.067	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Sodium	480		52	7.6	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Thallium	<5.2		5.2	2.6	mg/Kg	☼	06/01/18 15:49	06/05/18 14:12	10
Vanadium	18		0.26	0.061	mg/Kg	☼	06/01/18 15:49	06/04/18 23:17	1
Zinc	88		10	4.5	mg/Kg	☼	06/01/18 15:49	06/05/18 14:12	10

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 14:45	06/06/18 21:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:45	06/06/18 21:27	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:27	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 21:27	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B26

Lab Sample ID: 500-146241-6

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 21:27	1
Manganese	0.31		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:27	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.057		0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:30	1
Barium	0.45	J	0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:30	1
Beryllium	0.0060		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:30	1
Boron	0.20		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:30	1
Cadmium	0.0027	J	0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:30	1
Calcium	25		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:30	1
Chromium	0.14		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:30	1
Cobalt	0.041		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:30	1
Iron	150		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:30	1
Lead	0.078		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:30	1
Manganese	0.68		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:30	1
Nickel	0.14		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:30	1
Potassium	34		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:30	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:30	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:30	1
Zinc	0.45	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:45	06/07/18 23:58	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:05	1
Thallium	0.0026		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:05	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00025		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.018	0.0059	mg/Kg	☼	06/04/18 15:05	06/05/18 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	06/11/18 11:05	06/11/18 15:49	1
pH	8.5		0.20	0.20	SU			06/06/18 15:02	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B27

Lab Sample ID: 500-146241-7

Date Collected: 05/31/18 15:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Acetone	0.015	J	0.017	0.0074	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 05:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	05/31/18 18:29	06/06/18 05:37	1
4-Bromofluorobenzene (Surr)	107		75 - 131	05/31/18 18:29	06/06/18 05:37	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/06/18 05:37	1
Toluene-d8 (Surr)	97		75 - 124	05/31/18 18:29	06/06/18 05:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B27

Lab Sample ID: 500-146241-7

Date Collected: 05/31/18 15:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B27

Lab Sample ID: 500-146241-7

Date Collected: 05/31/18 15:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	06/04/18 07:02	06/05/18 04:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		25 - 139				06/04/18 07:02	06/05/18 04:42	1
2-Fluorobiphenyl	75		44 - 121				06/04/18 07:02	06/05/18 04:42	1
2-Fluorophenol	65		46 - 133				06/04/18 07:02	06/05/18 04:42	1
Nitrobenzene-d5	66		41 - 120				06/04/18 07:02	06/05/18 04:42	1
Phenol-d5	62		46 - 125				06/04/18 07:02	06/05/18 04:42	1
Terphenyl-d14	99		35 - 160				06/04/18 07:02	06/05/18 04:42	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	☼	06/01/18 15:49	06/04/18 23:21	1
Arsenic	7.8		0.56	0.19	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Barium	51		0.56	0.064	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Beryllium	0.75		0.22	0.052	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Boron	8.4		2.8	0.26	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Cadmium	0.32		0.11	0.020	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Calcium	32000	B	11	1.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Chromium	16		0.56	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Cobalt	13		0.28	0.074	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Copper	22		0.56	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Iron	21000		11	5.8	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Lead	15		0.28	0.13	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Magnesium	17000	B	5.6	2.8	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Manganese	480		0.56	0.081	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Nickel	32		0.56	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Potassium	2000		28	9.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Selenium	1.1		0.56	0.33	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Silver	0.24	J	0.28	0.073	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Sodium	640		56	8.3	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Vanadium	22		0.28	0.066	mg/Kg	☼	06/01/18 15:49	06/04/18 23:21	1
Zinc	71		1.1	0.49	mg/Kg	☼	06/01/18 15:49	06/05/18 14:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:34	1
Barium	<0.50		0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:34	1
Boron	<0.10		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:34	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B27

Lab Sample ID: 500-146241-7

Date Collected: 05/31/18 15:05

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:34	1
Calcium	16		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:34	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:34	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:34	1
Iron	3.5		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:34	1
Manganese	0.12		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:34	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:34	1
Potassium	1.9 J		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:34	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:34	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:34	1
Zinc	0.085 J B		0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:34	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:09	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.017	0.0057	mg/Kg	☼	06/04/18 15:05	06/05/18 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	06/11/18 11:05	06/11/18 15:49	1
pH	7.8		0.20	0.20	SU			06/06/18 15:05	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B28

Lab Sample ID: 500-146241-8

Date Collected: 05/31/18 15:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Acetone	0.011	J	0.019	0.0081	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Bromomethane	<0.0046	*	0.0046	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 06:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 134	05/31/18 18:29	06/06/18 06:03	1
4-Bromofluorobenzene (Surr)	106		75 - 131	05/31/18 18:29	06/06/18 06:03	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/06/18 06:03	1
Toluene-d8 (Surr)	96		75 - 124	05/31/18 18:29	06/06/18 06:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B28

Lab Sample ID: 500-146241-8

Date Collected: 05/31/18 15:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2-Methylnaphthalene	<0.078		0.078	0.0072	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B28

Lab Sample ID: 500-146241-8

Date Collected: 05/31/18 15:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	06/04/18 07:02	06/06/18 10:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	66		25 - 139				06/04/18 07:02	06/06/18 10:56	1
2-Fluorobiphenyl	94		44 - 121				06/04/18 07:02	06/06/18 10:56	1
2-Fluorophenol	116		46 - 133				06/04/18 07:02	06/06/18 10:56	1
Nitrobenzene-d5	87		41 - 120				06/04/18 07:02	06/06/18 10:56	1
Phenol-d5	107		46 - 125				06/04/18 07:02	06/06/18 10:56	1
Terphenyl-d14	129		35 - 160				06/04/18 07:02	06/06/18 10:56	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	☼	06/01/18 15:49	06/04/18 23:25	1
Arsenic	9.7		0.56	0.19	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Barium	67		0.56	0.064	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Beryllium	0.62		0.23	0.053	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Boron	2.5 J		2.8	0.26	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Cadmium	0.18		0.11	0.020	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Calcium	1300 B		11	1.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Chromium	13		0.56	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Cobalt	11		0.28	0.074	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Copper	18		0.56	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Iron	21000		11	5.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Lead	19		0.28	0.13	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Magnesium	2400 B		5.6	2.8	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Manganese	590		0.56	0.082	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Nickel	21		0.56	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Potassium	840		28	10	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Selenium	0.83		0.56	0.33	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Silver	0.21 J		0.28	0.073	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Sodium	640		56	8.3	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Vanadium	23		0.28	0.066	mg/Kg	☼	06/01/18 15:49	06/04/18 23:25	1
Zinc	51		1.1	0.49	mg/Kg	☼	06/01/18 15:49	06/05/18 14:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.32 J		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 21:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 21:35	1
Manganese	0.11		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B28

Lab Sample ID: 500-146241-8

Date Collected: 05/31/18 15:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:38	1
Barium	0.22	J	0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:38	1
Boron	0.054	J	0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:38	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:38	1
Calcium	4.3		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:38	1
Chromium	0.048		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:38	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:38	1
Iron	43		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:38	1
Lead	0.0089		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:38	1
Manganese	0.71		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:38	1
Nickel	0.034		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:38	1
Potassium	6.7		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:38	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:38	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:38	1
Zinc	0.17	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:38	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:13	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.018	0.0060	mg/Kg	☼	06/04/18 15:05	06/05/18 17:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/09/18 15:25	06/09/18 17:36	1
pH	6.3		0.20	0.20	SU			06/06/18 15:08	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B69

Lab Sample ID: 500-146241-12

Date Collected: 05/31/18 10:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Acetone	0.045		0.020	0.0086	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Bromomethane	<0.0050	*	0.0050	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1
Xylenes, Total	<0.0040		0.0040	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 07:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	05/31/18 18:29	06/06/18 07:50	1
4-Bromofluorobenzene (Surr)	108		75 - 131	05/31/18 18:29	06/06/18 07:50	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/06/18 07:50	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/06/18 07:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B69

Lab Sample ID: 500-146241-12

Date Collected: 05/31/18 10:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Anthracene	0.0074	J	0.038	0.0064	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Benzo[a]anthracene	0.042		0.038	0.0052	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Benzo[a]pyrene	0.048		0.038	0.0074	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Benzo[b]fluoranthene	0.076		0.038	0.0083	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Benzo[g,h,i]perylene	0.021	J	0.038	0.012	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Benzo[k]fluoranthene	0.023	J	0.038	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Carbazole	0.12	J	0.19	0.096	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Chrysene	0.053		0.038	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Dibenz(a,h)anthracene	0.0078	J	0.038	0.0074	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Fluoranthene	0.094		0.038	0.0071	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B69

Lab Sample ID: 500-146241-12

Date Collected: 05/31/18 10:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.017	J	0.038	0.0099	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Phenanthrene	0.036	J	0.038	0.0053	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Pyrene	0.095		0.038	0.0076	mg/Kg	☼	06/04/18 07:02	06/06/18 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		25 - 139				06/04/18 07:02	06/06/18 17:57	1
2-Fluorobiphenyl	82		44 - 121				06/04/18 07:02	06/06/18 17:57	1
2-Fluorophenol	102		46 - 133				06/04/18 07:02	06/06/18 17:57	1
Nitrobenzene-d5	69		41 - 120				06/04/18 07:02	06/06/18 17:57	1
Phenol-d5	96		46 - 125				06/04/18 07:02	06/06/18 17:57	1
Terphenyl-d14	129		35 - 160				06/04/18 07:02	06/06/18 17:57	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Arsenic	8.1		0.58	0.20	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Barium	84		0.58	0.066	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Beryllium	0.60		0.23	0.054	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Boron	5.7		2.9	0.27	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Cadmium	0.42		0.12	0.021	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Calcium	51000	B	120	20	mg/Kg	☼	06/01/18 15:49	06/05/18 14:39	10
Chromium	12		0.58	0.29	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Cobalt	7.9		0.29	0.076	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Copper	16		0.58	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Iron	20000		12	6.0	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Lead	48		0.29	0.13	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Magnesium	23000	B	5.8	2.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Manganese	620		0.58	0.084	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Nickel	17		0.58	0.17	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Potassium	950		29	10	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Selenium	0.70		0.58	0.34	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Silver	0.17	J	0.29	0.075	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Sodium	3100		58	8.5	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Vanadium	19		0.29	0.068	mg/Kg	☼	06/01/18 15:49	06/04/18 23:45	1
Zinc	67		12	5.1	mg/Kg	☼	06/01/18 15:49	06/05/18 14:39	10

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:45	06/06/18 21:55	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:55	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 21:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 21:55	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B69

Lab Sample ID: 500-146241-12

Date Collected: 05/31/18 10:40

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	12		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:55	1
Nickel	0.016	J	0.025	0.010	mg/L		06/05/18 14:45	06/06/18 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.037	J	0.050	0.010	mg/L		06/05/18 16:01	06/06/18 19:50	1
Barium	0.75		0.50	0.050	mg/L		06/05/18 16:01	06/06/18 19:50	1
Beryllium	0.0045		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 19:50	1
Boron	0.12		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 19:50	1
Cadmium	0.0032	J	0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 19:50	1
Calcium	16		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:50	1
Chromium	0.13		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:50	1
Cobalt	0.043		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:50	1
Iron	130		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 19:50	1
Lead	0.21		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 19:50	1
Manganese	2.4		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:50	1
Nickel	0.12		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:50	1
Potassium	19		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 19:50	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 19:50	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 19:50	1
Zinc	0.56	B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 19:50	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:34	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00044		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.018	0.0059	mg/Kg	☼	06/04/18 15:05	06/05/18 17:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/09/18 15:25	06/09/18 17:37	1
pH	7.9		0.20	0.20	SU			06/06/18 15:16	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B70

Lab Sample ID: 500-146241-13

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Acetone	0.014	J	0.017	0.0075	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 08:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	05/31/18 18:29	06/06/18 08:17	1
4-Bromofluorobenzene (Surr)	105		75 - 131	05/31/18 18:29	06/06/18 08:17	1
Dibromofluoromethane	82		75 - 126	05/31/18 18:29	06/06/18 08:17	1
Toluene-d8 (Surr)	96		75 - 124	05/31/18 18:29	06/06/18 08:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B70

Lab Sample ID: 500-146241-13

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Benzo[a]anthracene	0.0092 J		0.039	0.0053	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Benzo[a]pyrene	0.014 J		0.039	0.0077	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Benzo[b]fluoranthene	0.017 J		0.039	0.0086	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Chrysene	0.014 J		0.039	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Fluoranthene	0.020 J		0.039	0.0074	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B70

Lab Sample ID: 500-146241-13

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Phenanthrene	0.0087	J	0.039	0.0055	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Pyrene	0.017	J	0.039	0.0079	mg/Kg	☼	06/04/18 07:02	06/06/18 14:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	56		25 - 139				06/04/18 07:02	06/06/18 14:11	1
2-Fluorobiphenyl	89		44 - 121				06/04/18 07:02	06/06/18 14:11	1
2-Fluorophenol	111		46 - 133				06/04/18 07:02	06/06/18 14:11	1
Nitrobenzene-d5	82		41 - 120				06/04/18 07:02	06/06/18 14:11	1
Phenol-d5	110		46 - 125				06/04/18 07:02	06/06/18 14:11	1
Terphenyl-d14	114		35 - 160				06/04/18 07:02	06/06/18 14:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Arsenic	6.6		0.58	0.20	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Barium	76		0.58	0.066	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Beryllium	0.52		0.23	0.054	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Boron	2.8	J	2.9	0.27	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Cadmium	0.23		0.12	0.021	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Calcium	6500	B	12	2.0	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Chromium	12		0.58	0.29	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Cobalt	9.0		0.29	0.076	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Copper	15		0.58	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Iron	16000		12	6.0	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Lead	19		0.29	0.13	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Magnesium	4700	B	5.8	2.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Manganese	610		0.58	0.084	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Nickel	16		0.58	0.17	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Potassium	760		29	10	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Selenium	1.3		0.58	0.34	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Silver	0.15	J	0.29	0.075	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Sodium	3500		58	8.6	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Vanadium	20		0.29	0.069	mg/Kg	☼	06/01/18 15:49	06/04/18 23:49	1
Zinc	51		1.2	0.51	mg/Kg	☼	06/01/18 15:49	06/05/18 14:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 22:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 22:00	1
Manganese	0.56		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:00	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B70

Lab Sample ID: 500-146241-13

Date Collected: 05/31/18 10:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.017	J	0.050	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Barium	0.45	J	0.50	0.050	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Boron	0.087	J	0.10	0.050	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Cadmium	0.0024	J	0.0050	0.0020	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Calcium	7.7		2.5	0.50	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Chromium	0.095		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Cobalt	0.024	J	0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Iron	83		0.40	0.20	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Lead	0.053		0.0075	0.0075	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Manganese	1.6		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Nickel	0.072		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Potassium	13		2.5	0.50	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Selenium	<0.050		0.050	0.020	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Silver	<0.025		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 19:54	1
Zinc	0.26	J B	0.50	0.020	mg/L	-	06/05/18 16:01	06/06/18 19:54	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	06/05/18 16:01	06/06/18 17:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	06/05/18 16:01	06/06/18 17:38	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00027		0.00020	0.00020	mg/L	-	06/06/18 13:15	06/07/18 11:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.017	0.0058	mg/Kg	☼	06/04/18 15:05	06/05/18 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	06/09/18 15:25	06/09/18 17:37	1
pH	7.4		0.20	0.20	SU			06/06/18 15:19	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B71

Lab Sample ID: 500-146241-14

Date Collected: 05/31/18 11:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Acetone	0.025		0.017	0.0075	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	05/31/18 18:29	06/06/18 08:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	05/31/18 18:29	06/06/18 08:43	1
4-Bromofluorobenzene (Surr)	114		75 - 131	05/31/18 18:29	06/06/18 08:43	1
Dibromofluoromethane	86		75 - 126	05/31/18 18:29	06/06/18 08:43	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/06/18 08:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B71

Lab Sample ID: 500-146241-14

Date Collected: 05/31/18 11:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Benzo[a]anthracene	0.015	J	0.038	0.0052	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Benzo[a]pyrene	0.023	J	0.038	0.0074	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Benzo[b]fluoranthene	0.028	J	0.038	0.0083	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Benzo[k]fluoranthene	0.012	J	0.038	0.011	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Chrysene	0.019	J	0.038	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Fluoranthene	0.022	J	0.038	0.0071	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B71

Lab Sample ID: 500-146241-14

Date Collected: 05/31/18 11:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.014	J	0.038	0.010	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Phenanthrene	0.0078	J	0.038	0.0054	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Pyrene	0.020	J	0.038	0.0076	mg/Kg	☼	06/04/18 07:02	06/06/18 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		25 - 139				06/04/18 07:02	06/06/18 16:32	1
2-Fluorobiphenyl	94		44 - 121				06/04/18 07:02	06/06/18 16:32	1
2-Fluorophenol	117		46 - 133				06/04/18 07:02	06/06/18 16:32	1
Nitrobenzene-d5	85		41 - 120				06/04/18 07:02	06/06/18 16:32	1
Phenol-d5	110		46 - 125				06/04/18 07:02	06/06/18 16:32	1
Terphenyl-d14	117		35 - 160				06/04/18 07:02	06/06/18 16:32	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	☼	06/01/18 15:49	06/04/18 23:53	1
Arsenic	7.2		0.57	0.19	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Barium	60		0.57	0.065	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Beryllium	0.62		0.23	0.053	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Boron	2.6	J	2.8	0.27	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Cadmium	0.21		0.11	0.021	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Calcium	6100	B	11	1.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Chromium	13		0.57	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Cobalt	10		0.28	0.075	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Copper	15		0.57	0.16	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Iron	17000		11	5.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Lead	22		0.28	0.13	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Magnesium	5000	B	5.7	2.8	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Manganese	480		0.57	0.083	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Nickel	19		0.57	0.17	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Potassium	780		28	10	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Selenium	1.1		0.57	0.34	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Silver	0.19	J	0.28	0.074	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Sodium	2700		57	8.4	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Vanadium	24		0.28	0.067	mg/Kg	☼	06/01/18 15:49	06/04/18 23:53	1
Zinc	53		1.1	0.50	mg/Kg	☼	06/01/18 15:49	06/05/18 14:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:45	06/06/18 22:04	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:04	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 22:04	1
Lead	0.0084		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 22:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B71

Lab Sample ID: 500-146241-14

Date Collected: 05/31/18 11:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.2		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:04	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.040	J	0.050	0.010	mg/L		06/05/18 16:01	06/06/18 20:07	1
Barium	0.55		0.50	0.050	mg/L		06/05/18 16:01	06/06/18 20:07	1
Beryllium	0.0046		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 20:07	1
Boron	0.098	J	0.10	0.050	mg/L		06/05/18 16:01	06/06/18 20:07	1
Cadmium	0.0025	J	0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 20:07	1
Calcium	13		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 20:07	1
Chromium	0.14		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:07	1
Cobalt	0.042		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:07	1
Iron	140		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 20:07	1
Lead	0.15		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 20:07	1
Manganese	2.0		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:07	1
Nickel	0.12		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:07	1
Potassium	16		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 20:07	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 20:07	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:07	1
Zinc	0.48	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 20:07	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:42	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00047		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.018	0.0061	mg/Kg	☼	06/04/18 15:05	06/05/18 17:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	06/09/18 15:25	06/09/18 17:37	1
pH	7.5		0.20	0.20	SU			06/06/18 15:21	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1

Lab Sample ID: 500-146241-15

Date Collected: 05/31/18 11:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Acetone	0.010	J	0.018	0.0078	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Bromomethane	<0.0045	*	0.0045	0.0017	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/31/18 18:29	06/06/18 09:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	05/31/18 18:29	06/06/18 09:10	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/06/18 09:10	1
Dibromofluoromethane	84		75 - 126	05/31/18 18:29	06/06/18 09:10	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/06/18 09:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1

Lab Sample ID: 500-146241-15

Date Collected: 05/31/18 11:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Benzo[a]anthracene	0.0069	J	0.039	0.0053	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Benzo[b]fluoranthene	0.0098	J	0.039	0.0085	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1

Lab Sample ID: 500-146241-15

Date Collected: 05/31/18 11:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	06/04/18 07:02	06/05/18 05:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	46		25 - 139				06/04/18 07:02	06/05/18 05:54	1
2-Fluorobiphenyl	65		44 - 121				06/04/18 07:02	06/05/18 05:54	1
2-Fluorophenol	55		46 - 133				06/04/18 07:02	06/05/18 05:54	1
Nitrobenzene-d5	56		41 - 120				06/04/18 07:02	06/05/18 05:54	1
Phenol-d5	48		46 - 125				06/04/18 07:02	06/05/18 05:54	1
Terphenyl-d14	87		35 - 160				06/04/18 07:02	06/05/18 05:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Arsenic	6.3		0.60	0.21	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Barium	130		0.60	0.069	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Beryllium	0.64		0.24	0.056	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Boron	3.4		3.0	0.28	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Cadmium	0.25		0.12	0.022	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Calcium	1900	B	12	2.0	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Chromium	13		0.60	0.30	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Cobalt	11		0.30	0.079	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Copper	14		0.60	0.17	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Iron	16000		12	6.3	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Lead	17		0.30	0.14	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Magnesium	1800	B	6.0	3.0	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Manganese	860		0.60	0.087	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Nickel	18		0.60	0.18	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Potassium	900		30	11	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Selenium	0.83		0.60	0.35	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Silver	0.23	J	0.30	0.078	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Sodium	3200		60	8.9	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Vanadium	24		0.30	0.071	mg/Kg	☼	06/01/18 15:49	06/04/18 23:57	1
Zinc	57		1.2	0.53	mg/Kg	☼	06/01/18 15:49	06/05/18 14:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.26	J	0.40	0.20	mg/L		06/05/18 14:45	06/06/18 22:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 22:08	1
Manganese	0.038		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:08	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1

Lab Sample ID: 500-146241-15

Date Collected: 05/31/18 11:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.025	J	0.050	0.010	mg/L		06/05/18 16:01	06/06/18 20:11	1
Barium	0.66		0.50	0.050	mg/L		06/05/18 16:01	06/06/18 20:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 20:11	1
Boron	0.086	J	0.10	0.050	mg/L		06/05/18 16:01	06/06/18 20:11	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 20:11	1
Calcium	8.1		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 20:11	1
Chromium	0.10		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:11	1
Cobalt	0.027		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:11	1
Iron	100		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 20:11	1
Lead	0.043		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 20:11	1
Manganese	2.0		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:11	1
Nickel	0.085		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:11	1
Potassium	12		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 20:11	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 20:11	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:11	1
Zinc	0.33	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 20:11	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:46	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00032		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.020	0.0066	mg/Kg	☼	06/04/18 15:05	06/05/18 17:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.18	mg/Kg	☼	06/09/18 15:25	06/09/18 17:38	1
pH	7.8		0.20	0.20	SU			06/06/18 15:24	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1 Dup

Lab Sample ID: 500-146241-16

Date Collected: 05/31/18 11:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Acetone	0.015	J	0.019	0.0081	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	05/31/18 18:29	06/09/18 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 134	05/31/18 18:29	06/09/18 16:51	1
4-Bromofluorobenzene (Surr)	91		75 - 131	05/31/18 18:29	06/09/18 16:51	1
Dibromofluoromethane	113		75 - 126	05/31/18 18:29	06/09/18 16:51	1
Toluene-d8 (Surr)	123		75 - 124	05/31/18 18:29	06/09/18 16:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1 Dup

Lab Sample ID: 500-146241-16

Date Collected: 05/31/18 11:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Benzo[a]anthracene	0.012	J	0.040	0.0054	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Benzo[a]pyrene	0.013	J	0.040	0.0078	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Benzo[b]fluoranthene	0.016	J	0.040	0.0087	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Chrysene	0.013	J	0.040	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Fluoranthene	0.016	J	0.040	0.0075	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Hexachlorobenzene	<0.081		0.081	0.0094	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1 Dup

Lab Sample ID: 500-146241-16

Date Collected: 05/31/18 11:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Phenanthrene	0.010	J	0.040	0.0056	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Pyrene	0.017	J	0.040	0.0080	mg/Kg	☼	06/04/18 07:02	06/05/18 13:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	65		25 - 139				06/04/18 07:02	06/05/18 13:09	1
2-Fluorobiphenyl	96		44 - 121				06/04/18 07:02	06/05/18 13:09	1
2-Fluorophenol	125		46 - 133				06/04/18 07:02	06/05/18 13:09	1
Nitrobenzene-d5	94		41 - 120				06/04/18 07:02	06/05/18 13:09	1
Phenol-d5	116		46 - 125				06/04/18 07:02	06/05/18 13:09	1
Terphenyl-d14	118		35 - 160				06/04/18 07:02	06/05/18 13:09	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	☼	06/01/18 15:49	06/05/18 00:01	1
Arsenic	6.1		0.62	0.21	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Barium	130		0.62	0.070	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Beryllium	0.60		0.25	0.057	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Boron	3.2		3.1	0.29	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Cadmium	0.28		0.12	0.022	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Calcium	1900	B	12	2.1	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Chromium	12		0.62	0.30	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Cobalt	9.4		0.31	0.081	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Copper	13		0.62	0.17	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Iron	16000		12	6.4	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Lead	21		0.31	0.14	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Magnesium	1700	B	6.2	3.1	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Manganese	780		0.62	0.089	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Nickel	16		0.62	0.18	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Potassium	830		31	11	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Selenium	1.3		0.62	0.36	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Silver	0.24	J	0.31	0.079	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Sodium	3600		62	9.1	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Vanadium	23		0.31	0.073	mg/Kg	☼	06/01/18 15:49	06/05/18 00:01	1
Zinc	56		1.2	0.54	mg/Kg	☼	06/01/18 15:49	06/05/18 14:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.85		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 22:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 22:12	1
Manganese	0.069		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-1 Dup

Lab Sample ID: 500-146241-16

Date Collected: 05/31/18 11:25

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 80.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	J	0.050	0.010	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Barium	0.57		0.50	0.050	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Boron	0.076	J	0.10	0.050	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Cadmium	0.0021	J	0.0050	0.0020	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Calcium	6.5		2.5	0.50	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Chromium	0.077		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Cobalt	0.019	J	0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Iron	68		0.40	0.20	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Lead	0.050		0.0075	0.0075	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Manganese	1.9		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Nickel	0.060		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Potassium	10		2.5	0.50	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Selenium	<0.050		0.050	0.020	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Silver	<0.025		0.025	0.010	mg/L	-	06/05/18 16:01	06/06/18 20:15	1
Zinc	0.35	J B	0.50	0.020	mg/L	-	06/05/18 16:01	06/06/18 20:15	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	06/05/18 16:01	06/06/18 17:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	06/05/18 16:01	06/06/18 17:50	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00023		0.00020	0.00020	mg/L	-	06/06/18 13:15	06/07/18 11:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.019	0.0063	mg/Kg	☼	06/04/18 15:05	06/06/18 07:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.62		0.62	0.21	mg/Kg	☼	06/09/18 15:25	06/09/18 17:38	1
pH	7.6		0.20	0.20	SU			06/06/18 15:29	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-2

Lab Sample ID: 500-146241-17

Date Collected: 05/31/18 11:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/31/18 18:29	06/09/18 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125		70 - 134	05/31/18 18:29	06/09/18 17:19	1
4-Bromofluorobenzene (Surr)	106		75 - 131	05/31/18 18:29	06/09/18 17:19	1
Dibromofluoromethane	131	X	75 - 126	05/31/18 18:29	06/09/18 17:19	1
Toluene-d8 (Surr)	108		75 - 124	05/31/18 18:29	06/09/18 17:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-2

Lab Sample ID: 500-146241-17

Date Collected: 05/31/18 11:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-2

Lab Sample ID: 500-146241-17

Date Collected: 05/31/18 11:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	06/04/18 07:02	06/05/18 13:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	70		25 - 139				06/04/18 07:02	06/05/18 13:37	1
2-Fluorobiphenyl	83		44 - 121				06/04/18 07:02	06/05/18 13:37	1
2-Fluorophenol	114		46 - 133				06/04/18 07:02	06/05/18 13:37	1
Nitrobenzene-d5	81		41 - 120				06/04/18 07:02	06/05/18 13:37	1
Phenol-d5	110		46 - 125				06/04/18 07:02	06/05/18 13:37	1
Terphenyl-d14	115		35 - 160				06/04/18 07:02	06/05/18 13:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Arsenic	8.3		0.58	0.20	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Barium	28		0.58	0.066	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Beryllium	0.42		0.23	0.054	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Boron	4.1		2.9	0.27	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Cadmium	0.32		0.12	0.021	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Calcium	810	B	12	2.0	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Chromium	9.5		0.58	0.29	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Cobalt	6.9		0.29	0.076	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Copper	31		0.58	0.16	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Iron	18000		12	6.0	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Lead	15		0.29	0.13	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Magnesium	1800	B	5.8	2.9	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Manganese	560		0.58	0.084	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Nickel	28		0.58	0.17	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Potassium	900		29	10	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Selenium	1.2		0.58	0.34	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Silver	0.18	J	0.29	0.074	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Sodium	670		58	8.5	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Thallium	0.50	J	0.58	0.29	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Vanadium	13		0.29	0.068	mg/Kg	☼	06/01/18 15:49	06/05/18 00:05	1
Zinc	63		1.2	0.51	mg/Kg	☼	06/01/18 15:49	06/05/18 14:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 14:45	06/06/18 22:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:45	06/06/18 22:16	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:16	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 14:45	06/06/18 22:16	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B72-2

Lab Sample ID: 500-146241-17

Date Collected: 05/31/18 11:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:45	06/06/18 22:16	1
Manganese	0.24		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:16	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 14:45	06/06/18 22:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.052		0.050	0.010	mg/L		06/05/18 16:01	06/06/18 20:19	1
Barium	0.31	J	0.50	0.050	mg/L		06/05/18 16:01	06/06/18 20:19	1
Beryllium	0.0041		0.0040	0.0040	mg/L		06/05/18 16:01	06/06/18 20:19	1
Boron	0.21		0.10	0.050	mg/L		06/05/18 16:01	06/06/18 20:19	1
Cadmium	0.0028	J	0.0050	0.0020	mg/L		06/05/18 16:01	06/06/18 20:19	1
Calcium	8.4		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 20:19	1
Chromium	0.11		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:19	1
Cobalt	0.027		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:19	1
Iron	130		0.40	0.20	mg/L		06/05/18 16:01	06/06/18 20:19	1
Lead	0.054		0.0075	0.0075	mg/L		06/05/18 16:01	06/06/18 20:19	1
Manganese	1.5		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:19	1
Nickel	0.13		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:19	1
Potassium	26		2.5	0.50	mg/L		06/05/18 16:01	06/06/18 20:19	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 16:01	06/06/18 20:19	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 16:01	06/06/18 20:19	1
Zinc	0.46	J B	0.50	0.020	mg/L		06/05/18 16:01	06/06/18 20:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:45	06/08/18 00:06	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 16:01	06/06/18 17:54	1
Thallium	0.0030		0.0020	0.0020	mg/L		06/05/18 16:01	06/06/18 17:54	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00032		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 11:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0063	mg/Kg	☼	06/04/18 15:05	06/06/18 07:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/09/18 15:25	06/09/18 17:40	1
pH	7.3		0.20	0.20	SU			06/06/18 15:32	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76

Lab Sample ID: 500-146241-21

Date Collected: 05/31/18 12:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Acetone	0.012	J	0.019	0.0082	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	05/31/18 18:29	06/11/18 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	05/31/18 18:29	06/11/18 13:17	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/11/18 13:17	1
Dibromofluoromethane	83		75 - 126	05/31/18 18:29	06/11/18 13:17	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/11/18 13:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76

Lab Sample ID: 500-146241-21

Date Collected: 05/31/18 12:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Benzo[a]anthracene	0.0070	J	0.038	0.0052	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Benzo[a]pyrene	0.029	J	0.038	0.0075	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Benzo[b]fluoranthene	0.011	J	0.038	0.0083	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Dibenz(a,h)anthracene	0.023	J	0.038	0.0075	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Fluoranthene	0.011	J	0.038	0.0071	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76

Lab Sample ID: 500-146241-21

Date Collected: 05/31/18 12:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.028	J	0.038	0.010	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Phenanthrene	0.0073	J	0.038	0.0054	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Pyrene	0.011	J	0.038	0.0077	mg/Kg	☼	06/04/18 16:53	06/07/18 14:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	42		25 - 139				06/04/18 16:53	06/07/18 14:58	1
2-Fluorobiphenyl	55		44 - 121				06/04/18 16:53	06/07/18 14:58	1
2-Fluorophenol	76		46 - 133				06/04/18 16:53	06/07/18 14:58	1
Nitrobenzene-d5	54		41 - 120				06/04/18 16:53	06/07/18 14:58	1
Phenol-d5	71		46 - 125				06/04/18 16:53	06/07/18 14:58	1
Terphenyl-d14	74		35 - 160				06/04/18 16:53	06/07/18 14:58	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	☼	06/01/18 15:49	06/05/18 00:21	1
Arsenic	9.2		0.57	0.19	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Barium	67		0.57	0.065	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Beryllium	0.57		0.23	0.053	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Boron	4.0		2.8	0.26	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Cadmium	0.42		0.11	0.020	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Calcium	3300	B	11	1.9	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Chromium	11		0.57	0.28	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Cobalt	10		0.28	0.074	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Copper	23		0.57	0.16	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Iron	19000		11	5.9	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Lead	24		0.28	0.13	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Magnesium	2700	B	5.7	2.8	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Manganese	580		0.57	0.082	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Nickel	22		0.57	0.16	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Potassium	1100		28	10	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Selenium	1.2		0.57	0.33	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Silver	0.20	J	0.28	0.073	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Sodium	1300		57	8.4	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Thallium	0.32	J	0.57	0.28	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Vanadium	19		0.28	0.067	mg/Kg	☼	06/01/18 15:49	06/05/18 00:21	1
Zinc	86		1.1	0.50	mg/Kg	☼	06/01/18 15:49	06/05/18 15:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:42	06/06/18 12:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 14:42	06/06/18 12:18	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:42	06/06/18 12:18	1
Iron	0.80		0.40	0.20	mg/L		06/05/18 14:42	06/06/18 12:18	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76

Lab Sample ID: 500-146241-21

Date Collected: 05/31/18 12:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:42	06/06/18 12:18	1
Manganese	0.087		0.025	0.010	mg/L		06/05/18 14:42	06/06/18 12:18	1
Nickel	0.011	J	0.025	0.010	mg/L		06/05/18 14:42	06/06/18 12:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.029	J	0.050	0.010	mg/L		06/06/18 07:31	06/06/18 16:15	1
Barium	0.71		0.50	0.050	mg/L		06/06/18 07:31	06/06/18 16:15	1
Beryllium	0.0079		0.0040	0.0040	mg/L		06/06/18 07:31	06/06/18 16:15	1
Boron	0.32		0.10	0.050	mg/L		06/06/18 07:31	06/06/18 16:15	1
Cadmium	0.0063		0.0050	0.0020	mg/L		06/06/18 07:31	06/06/18 16:15	1
Calcium	12		2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:15	1
Chromium	0.20		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:15	1
Cobalt	0.040		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:15	1
Iron	170		0.40	0.20	mg/L		06/06/18 07:31	06/06/18 16:15	1
Lead	0.090		0.038	0.038	mg/L		06/06/18 07:31	06/07/18 11:55	5
Manganese	1.2		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:15	1
Nickel	0.17		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:15	1
Potassium	59		2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:15	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 07:31	06/06/18 16:15	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:15	1
Zinc	0.59	B	0.50	0.020	mg/L		06/06/18 07:31	06/06/18 16:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:42	06/08/18 10:54	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 07:31	06/07/18 17:26	1
Thallium	0.0043		0.0020	0.0020	mg/L		06/06/18 07:31	06/08/18 10:42	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00033		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 12:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.020	0.0067	mg/Kg	☼	06/04/18 15:05	06/06/18 07:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	06/09/18 15:25	06/09/18 17:41	1
pH	7.5		0.20	0.20	SU			06/06/18 15:43	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76 Dup

Lab Sample ID: 500-146241-22

Date Collected: 05/31/18 12:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Acetone	0.014	J	0.017	0.0074	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/31/18 18:29	06/09/18 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	135	X	70 - 134	05/31/18 18:29	06/09/18 19:36	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/09/18 19:36	1
Dibromofluoromethane	116		75 - 126	05/31/18 18:29	06/09/18 19:36	1
Toluene-d8 (Surr)	106		75 - 124	05/31/18 18:29	06/09/18 19:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76 Dup

Lab Sample ID: 500-146241-22

Date Collected: 05/31/18 12:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2-Methylnaphthalene	<0.085		0.085	0.0078	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Benzo[a]anthracene	0.015 J		0.042	0.0057	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Benzo[a]pyrene	0.039 J		0.042	0.0082	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Benzo[b]fluoranthene	0.024 J		0.042	0.0091	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Benzo[g,h,i]perylene	0.015 J		0.042	0.014	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Chrysene	0.021 J		0.042	0.012	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Dibenz(a,h)anthracene	0.027 J		0.042	0.0082	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Fluoranthene	0.034 J		0.042	0.0078	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76 Dup

Lab Sample ID: 500-146241-22

Date Collected: 05/31/18 12:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.035	J	0.042	0.011	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Phenanthrene	0.021	J	0.042	0.0059	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Pyrene	0.030	J	0.042	0.0084	mg/Kg	☼	06/04/18 16:53	06/07/18 15:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	36		25 - 139				06/04/18 16:53	06/07/18 15:28	1
2-Fluorobiphenyl	56		44 - 121				06/04/18 16:53	06/07/18 15:28	1
2-Fluorophenol	79		46 - 133				06/04/18 16:53	06/07/18 15:28	1
Nitrobenzene-d5	54		41 - 120				06/04/18 16:53	06/07/18 15:28	1
Phenol-d5	72		46 - 125				06/04/18 16:53	06/07/18 15:28	1
Terphenyl-d14	70		35 - 160				06/04/18 16:53	06/07/18 15:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Arsenic	6.9		0.59	0.20	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Barium	140		0.59	0.067	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Beryllium	0.77		0.23	0.055	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Boron	7.6		2.9	0.27	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Cadmium	0.39	B	0.12	0.021	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Calcium	3500	B	12	2.0	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Chromium	17		0.59	0.29	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Cobalt	10		0.29	0.077	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Copper	18		0.59	0.16	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Iron	19000		12	6.1	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Lead	21		0.29	0.14	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Magnesium	3100		5.9	2.9	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Manganese	760		0.59	0.085	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Nickel	21		0.59	0.17	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Potassium	2000		29	10	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Selenium	0.37	J B	0.59	0.35	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Silver	0.23	J	0.29	0.076	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Sodium	1700		59	8.7	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Vanadium	29		0.29	0.069	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1
Zinc	87		1.2	0.52	mg/Kg	☼	06/01/18 08:20	06/01/18 18:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 14:42	06/06/18 12:22	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 14:42	06/06/18 12:22	1
Iron	0.32	J	0.40	0.20	mg/L		06/05/18 14:42	06/06/18 12:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 14:42	06/06/18 12:22	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Client Sample ID: 1628V2-1-B76 Dup

Lab Sample ID: 500-146241-22

Date Collected: 05/31/18 12:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.083		0.025	0.010	mg/L		06/05/18 14:42	06/06/18 12:22	1
Nickel	0.011	J	0.025	0.010	mg/L		06/05/18 14:42	06/06/18 12:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.027	J	0.050	0.010	mg/L		06/06/18 07:31	06/06/18 16:19	1
Barium	0.60		0.50	0.050	mg/L		06/06/18 07:31	06/06/18 16:19	1
Beryllium	0.0044		0.0040	0.0040	mg/L		06/06/18 07:31	06/06/18 16:19	1
Boron	0.14		0.10	0.050	mg/L		06/06/18 07:31	06/06/18 16:19	1
Cadmium	0.0034	J	0.0050	0.0020	mg/L		06/06/18 07:31	06/06/18 16:19	1
Calcium	12		2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:19	1
Chromium	0.12		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:19	1
Cobalt	0.024	J	0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:19	1
Iron	110		0.40	0.20	mg/L		06/06/18 07:31	06/06/18 16:19	1
Lead	0.042		0.0075	0.0075	mg/L		06/06/18 07:31	06/06/18 16:19	1
Manganese	1.0		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:19	1
Nickel	0.11		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:19	1
Potassium	24	F1	2.5	0.50	mg/L		06/06/18 07:31	06/06/18 16:19	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 07:31	06/06/18 16:19	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 07:31	06/06/18 16:19	1
Zinc	0.54	B	0.50	0.020	mg/L		06/06/18 07:31	06/06/18 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 14:42	06/08/18 10:58	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		06/06/18 07:31	06/07/18 17:30	1
Thallium	0.0024	F1	0.0020	0.0020	mg/L		06/06/18 07:31	06/07/18 17:30	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00040		0.00020	0.00020	mg/L		06/06/18 13:15	06/07/18 12:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.021		0.021	0.0069	mg/Kg	☼	06/04/18 15:05	06/05/18 19:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	06/09/18 15:25	06/09/18 17:41	1
pH	7.8		0.20	0.20	SU			06/06/18 15:46	1

TestAmerica Chicago

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

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.
B	Compound was found in the blank and sample.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146241-1

Laboratory: TestAmerica Chicago

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

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

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

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

CHAIN OF CUSTODY RECORD


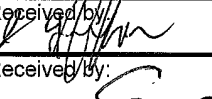
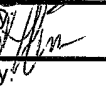
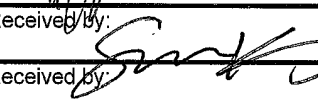
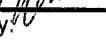

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>L-80 WILL COUNTY</u> Project No.: <u>PTB 184-006/AC-7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other (7B1) Sampler: <u>CSP/CRM</u>	COC No.: <u>3</u> of <u>4</u> Lab Job No.: <u>500-146241</u> Sample Temp: <u>(20)(24)(3.1)</u> <u>(3.6)(4.2)(3.0)(5.1)(4.0)</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds ~~Class I Standard~~ ^{MAC}, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES											
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization
X	X					X	X	X	X	X	

Matrix Key:
 W: Water
 S: Soil
 SL: Sludge
 S: Sediment
 L: Leachate
 DW: Drinking Water
 OL: Oil
 O: Other

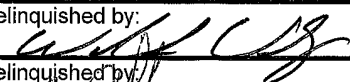
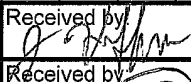
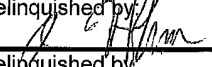

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	1628V2-1-B 21	5/31	1415	S	X	X					X	X	X	X	X		0-4.5 TBS
2	1628V2-1-B 22		1425														0-4.5 TBS
3	1628V2-1-B 23		1435														0-6 TBS
4	1628V2-1-B 24		1440														0-4 TBS
5	1628V2-1-B 25		1450														0-4 TBS
6	1628V2-1-B 26		1500														0-4 TBS
7	1628V2-1-B 27		1505														0-8 TBS
8	1628V2-1-B 28		1510														0-8 TBS
9	1628V2-1-B 29		1520														0-8 TBS
	1628V2-1-B																
	1628V2-1-B																
10	Trip Blank #3			S	X												

Relinquished by: 	Date/Time: 5/31/18 1600	Received by: 	Date/Time: 5/31/18 1600
Relinquished by: 	Date/Time: 5/31/18 1655	Received by: 	Date/Time: 05/31/18 1655
Relinquished by: 	Date/Time:	Received by: 	Date/Time:

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name: <u>I-80 WILL COUNTY</u>	COC No.: <u>4</u> of <u>4</u>
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>PT13# 194-006/AE7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>7BD</u>	Lab Job No.: <u>500-</u> <u>146241</u>
Special Instructions: See Table 2 for complete parameter lists and minimum reporting limits. * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal. ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter. *** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.			Sample Temp:
		Analyses	Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES												Comments	
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		
11	1628V2-1-1368	5-31	1030	S	X	X					X	X	X	X	X			TB 8
12	1628V2-1-1369	5-31	1040															TB 7
13	1628V2-1-1370	5-31	1050															TB 6
14	1628V2-1-1371	5-31	1100															TB 6
15	1628V2-1-1372-1	5-31	1115															TB 6
16	1628V2-1-1372-1 DVP	5-31	1125															TB 6
17	1628V2-1-1372-2	5-31	1135															TB 6
18	1628V2-1-1374-1	5-31	1145															TB 6
19	1628V2-1-1374-2	5-31	1155															TB 6
20	1628V2-1-1375	5-31	1210															TB 7
21	1628V2-1-1376	5-31	1235															TB 7
22	1628V2-1-1376 DVP	5-31	1245															TB 6

Relinquished by: 	Date/Time: <u>5/31/18 1617</u>	Received by: 	Date/Time: <u>5/31/18 1617</u>
Relinquished by: 	Date/Time: <u>5/31/18 1655</u>	Received by: 	Date/Time: <u>05/31/18 1655</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

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: 500-146311-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/14/2018 1:48:18 PM

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

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.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B35

Lab Sample ID: 500-146311-1

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Acetone	0.018		0.016	0.0070	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	06/01/18 17:41	06/08/18 12:28	1
4-Bromofluorobenzene (Surr)	109		75 - 131	06/01/18 17:41	06/08/18 12:28	1
Dibromofluoromethane	85		75 - 126	06/01/18 17:41	06/08/18 12:28	1
Toluene-d8 (Surr)	98		75 - 124	06/01/18 17:41	06/08/18 12:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B35

Lab Sample ID: 500-146311-1

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2,4-Dinitrophenol	<0.77	F2	0.77	0.67	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
4,6-Dinitro-2-methylphenol	<0.77	F2	0.77	0.31	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Benzo[a]anthracene	0.0053	J	0.038	0.0051	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Benzo[a]pyrene	0.028	J	0.038	0.0074	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Hexachlorocyclopentadiene	<0.77	F1	0.77	0.22	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B35

Lab Sample ID: 500-146311-1

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.026	J	0.038	0.0099	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Pentachlorophenol	<0.77	F2	0.77	0.61	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/06/18 07:13	06/08/18 14:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		25 - 139				06/06/18 07:13	06/08/18 14:42	1
2-Fluorobiphenyl	86		44 - 121				06/06/18 07:13	06/08/18 14:42	1
2-Fluorophenol	113		46 - 133				06/06/18 07:13	06/08/18 14:42	1
Nitrobenzene-d5	86		41 - 120				06/06/18 07:13	06/08/18 14:42	1
Phenol-d5	97		46 - 125				06/06/18 07:13	06/08/18 14:42	1
Terphenyl-d14	100		35 - 160				06/06/18 07:13	06/08/18 14:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Arsenic	6.9		0.60	0.20	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Barium	53		0.60	0.068	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Beryllium	0.53		0.24	0.056	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Boron	13		3.0	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Cadmium	0.30	B	0.12	0.021	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Calcium	130000	B	120	20	mg/Kg	☼	06/05/18 08:00	06/06/18 20:56	10
Chromium	14		0.60	0.29	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Cobalt	11		0.30	0.078	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Copper	22		0.60	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Iron	15000		12	6.2	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Lead	34		0.30	0.14	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Magnesium	52000		6.0	3.0	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Manganese	530		0.60	0.086	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Nickel	21		0.60	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Potassium	2200		30	11	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Selenium	0.84		0.60	0.35	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Silver	0.16	J	0.30	0.077	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Sodium	620		60	8.8	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Vanadium	17		0.30	0.070	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1
Zinc	53		1.2	0.52	mg/Kg	☼	06/05/18 08:00	06/06/18 02:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:21	06/07/18 21:48	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 21:48	1
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 21:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 21:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B35

Lab Sample ID: 500-146311-1

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	7.3		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 21:48	1
Nickel	0.030		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 21:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.043	J	0.050	0.010	mg/L		06/06/18 15:17	06/07/18 19:53	1
Barium	0.47	J	0.50	0.050	mg/L		06/06/18 15:17	06/07/18 19:53	1
Beryllium	0.0063		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 19:53	1
Boron	0.21		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 19:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 19:53	1
Calcium	38		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 19:53	1
Chromium	0.14		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 19:53	1
Cobalt	0.056		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 19:53	1
Iron	140		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 19:53	1
Lead	0.13		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 19:53	1
Manganese	1.5		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 19:53	1
Nickel	0.15		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 19:53	1
Potassium	35		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 19:53	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 19:53	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 19:53	1
Zinc	0.37	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 19:53	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:06	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00030		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 13:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029	B	0.019	0.0063	mg/Kg	☼	06/05/18 15:30	06/06/18 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	06/13/18 10:30	06/13/18 17:21	1
pH	8.4		0.20	0.20	SU			06/08/18 15:10	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B33

Lab Sample ID: 500-146311-3

Date Collected: 06/01/18 10:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Acetone	0.012	J	0.014	0.0062	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Carbon disulfide	<0.0035		0.0035	0.00074	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Chloroethane	<0.0035	*	0.0035	0.0010	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	06/01/18 17:41	06/06/18 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	139	X	70 - 134	06/01/18 17:41	06/06/18 18:27	1
4-Bromofluorobenzene (Surr)	101		75 - 131	06/01/18 17:41	06/06/18 18:27	1
Dibromofluoromethane	122		75 - 126	06/01/18 17:41	06/06/18 18:27	1
Toluene-d8 (Surr)	108		75 - 124	06/01/18 17:41	06/06/18 18:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B33

Lab Sample ID: 500-146311-3

Date Collected: 06/01/18 10:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B33

Lab Sample ID: 500-146311-3

Date Collected: 06/01/18 10:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 13:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		25 - 139				06/06/18 07:13	06/08/18 13:35	1
2-Fluorobiphenyl	95		44 - 121				06/06/18 07:13	06/08/18 13:35	1
2-Fluorophenol	120		46 - 133				06/06/18 07:13	06/08/18 13:35	1
Nitrobenzene-d5	87		41 - 120				06/06/18 07:13	06/08/18 13:35	1
Phenol-d5	108		46 - 125				06/06/18 07:13	06/08/18 13:35	1
Terphenyl-d14	110		35 - 160				06/06/18 07:13	06/08/18 13:35	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	☼	06/05/18 08:00	06/06/18 02:33	1
Arsenic	8.4		0.56	0.19	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Barium	46		0.56	0.064	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Beryllium	0.68		0.23	0.053	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Boron	15		2.8	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Cadmium	0.26	B	0.11	0.020	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Calcium	57000	B	110	19	mg/Kg	☼	06/05/18 08:00	06/06/18 21:04	10
Chromium	18		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Cobalt	13		0.28	0.074	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Copper	21		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Iron	20000		11	5.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Lead	15		0.28	0.13	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Magnesium	21000		5.6	2.8	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Manganese	400		0.56	0.082	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Nickel	35		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Potassium	3300		28	10	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Selenium	0.86		0.56	0.33	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Silver	0.24	J	0.28	0.073	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Sodium	450		56	8.3	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Vanadium	22		0.28	0.066	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1
Zinc	67		1.1	0.49	mg/Kg	☼	06/05/18 08:00	06/06/18 02:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:01	1
Barium	<0.50		0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:01	1
Boron	<0.10		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B33

Lab Sample ID: 500-146311-3

Date Collected: 06/01/18 10:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:01	1
Calcium	11		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:01	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:01	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:01	1
Iron	4.1		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:01	1
Manganese	0.028		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:01	1
Nickel	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:01	1
Potassium	2.6		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:01	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:01	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:01	1
Zinc	0.032	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:01	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:14	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 13:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	B	0.019	0.0064	mg/Kg	☼	06/05/18 15:30	06/06/18 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/13/18 10:30	06/13/18 17:22	1
pH	8.2		0.20	0.20	SU			06/08/18 15:16	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B32

Lab Sample ID: 500-146311-4

Date Collected: 06/01/18 10:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Acetone	0.034		0.017	0.0072	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Chloroethane	<0.0041 *		0.0041	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		70 - 134	06/01/18 17:41	06/06/18 18:54	1
4-Bromofluorobenzene (Surr)	91		75 - 131	06/01/18 17:41	06/06/18 18:54	1
Dibromofluoromethane	110		75 - 126	06/01/18 17:41	06/06/18 18:54	1
Toluene-d8 (Surr)	110		75 - 124	06/01/18 17:41	06/06/18 18:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B32

Lab Sample ID: 500-146311-4

Date Collected: 06/01/18 10:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Benzo[a]anthracene	0.018	J	0.038	0.0051	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Benzo[a]pyrene	0.031	J	0.038	0.0073	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Benzo[b]fluoranthene	0.040		0.038	0.0082	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Benzo[k]fluoranthene	0.013	J	0.038	0.011	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Carbazole	0.11	J	0.19	0.095	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Chrysene	0.027	J	0.038	0.010	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Fluoranthene	0.025	J	0.038	0.0070	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B32

Lab Sample ID: 500-146311-4

Date Collected: 06/01/18 10:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Phenanthrene	0.014	J	0.038	0.0053	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Pyrene	0.047		0.038	0.0075	mg/Kg	☼	06/06/18 07:13	06/11/18 16:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		25 - 139				06/06/18 07:13	06/11/18 16:56	1
2-Fluorobiphenyl	89		44 - 121				06/06/18 07:13	06/11/18 16:56	1
2-Fluorophenol	115		46 - 133				06/06/18 07:13	06/11/18 16:56	1
Nitrobenzene-d5	83		41 - 120				06/06/18 07:13	06/11/18 16:56	1
Phenol-d5	110		46 - 125				06/06/18 07:13	06/11/18 16:56	1
Terphenyl-d14	166	X	35 - 160				06/06/18 07:13	06/11/18 16:56	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	☼	06/05/18 08:00	06/06/18 02:37	1
Arsenic	6.7		0.56	0.19	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Barium	58		0.56	0.064	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Beryllium	0.66		0.22	0.052	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Boron	13		2.8	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Cadmium	0.33	B	0.11	0.020	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Calcium	93000	B	110	19	mg/Kg	☼	06/05/18 08:00	06/06/18 21:08	10
Chromium	17		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Cobalt	9.4		0.28	0.073	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Copper	31		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Iron	18000		11	5.8	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Lead	29		0.28	0.13	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Magnesium	32000		5.6	2.8	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Manganese	380		0.56	0.081	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Nickel	26		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Potassium	2700		28	9.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Selenium	1.2		0.56	0.33	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Silver	0.23	J	0.28	0.072	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Sodium	1100		56	8.3	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Vanadium	21		0.28	0.066	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1
Zinc	110		1.1	0.49	mg/Kg	☼	06/05/18 08:00	06/06/18 02:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:21	06/07/18 22:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:21	06/07/18 22:00	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:00	1
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 22:00	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B32

Lab Sample ID: 500-146311-4

Date Collected: 06/01/18 10:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 22:00	1
Manganese	5.1		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:00	1
Nickel	0.025		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.056		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:05	1
Barium	0.49	J	0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:05	1
Beryllium	0.0065		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:05	1
Boron	0.22		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:05	1
Calcium	41		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:05	1
Chromium	0.15		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:05	1
Cobalt	0.067		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:05	1
Iron	160		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:05	1
Lead	0.11		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:05	1
Manganese	1.3		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:05	1
Nickel	0.18		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:05	1
Potassium	39		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:05	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:05	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:05	1
Zinc	0.64	B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:21	06/08/18 11:11	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:18	1
Thallium	0.0026		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:18	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00023		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035	B	0.018	0.0061	mg/Kg	☼	06/05/18 15:30	06/06/18 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	06/13/18 10:30	06/13/18 17:22	1
pH	8.4		0.20	0.20	SU			06/08/18 15:18	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B31

Lab Sample ID: 500-146311-5

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Acetone	0.033		0.016	0.0070	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	06/01/18 17:41	06/08/18 12:55	1
4-Bromofluorobenzene (Surr)	108		75 - 131	06/01/18 17:41	06/08/18 12:55	1
Dibromofluoromethane	85		75 - 126	06/01/18 17:41	06/08/18 12:55	1
Toluene-d8 (Surr)	97		75 - 124	06/01/18 17:41	06/08/18 12:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B31

Lab Sample ID: 500-146311-5

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Benzo[a]anthracene	0.0061	J	0.039	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Benzo[a]pyrene	0.0088	J	0.039	0.0076	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Benzo[b]fluoranthene	0.011	J	0.039	0.0085	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Fluoranthene	0.0091	J	0.039	0.0073	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B31

Lab Sample ID: 500-146311-5

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1
Pyrene	0.0091	J	0.039	0.0078	mg/Kg	☼	06/06/18 07:13	06/08/18 14:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		25 - 139	06/06/18 07:13	06/08/18 14:03	1
2-Fluorobiphenyl	88		44 - 121	06/06/18 07:13	06/08/18 14:03	1
2-Fluorophenol	114		46 - 133	06/06/18 07:13	06/08/18 14:03	1
Nitrobenzene-d5	84		41 - 120	06/06/18 07:13	06/08/18 14:03	1
Phenol-d5	106		46 - 125	06/06/18 07:13	06/08/18 14:03	1
Terphenyl-d14	109		35 - 160	06/06/18 07:13	06/08/18 14:03	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	☼	06/05/18 08:00	06/06/18 02:41	1
Arsenic	9.3		0.56	0.19	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Barium	45		0.56	0.064	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Beryllium	0.56		0.23	0.053	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Boron	13		2.8	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Cadmium	0.32	B	0.11	0.020	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Calcium	82000	B	110	19	mg/Kg	☼	06/05/18 08:00	06/06/18 21:12	10
Chromium	15		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Cobalt	15		0.28	0.074	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Copper	21		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Iron	19000		11	5.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Lead	13		0.28	0.13	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Magnesium	27000		5.6	2.8	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Manganese	550		0.56	0.082	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Nickel	30		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Potassium	2400		28	10	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Selenium	1.1		0.56	0.33	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Silver	0.17	J	0.28	0.073	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Sodium	350		56	8.3	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Vanadium	20		0.28	0.067	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1
Zinc	65		1.1	0.49	mg/Kg	☼	06/05/18 08:00	06/06/18 02:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.29		0.20	0.20	mg/L		06/06/18 15:21	06/07/18 22:13	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B31

Lab Sample ID: 500-146311-5

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:09	1
Barium	<0.50		0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:09	1
Boron	<0.10		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:09	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:09	1
Calcium	14		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:09	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:09	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:09	1
Iron	5.2		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:09	1
Manganese	0.032		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:09	1
Nickel	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:09	1
Potassium	2.5		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:09	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:09	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:09	1
Zinc	0.060	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:09	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:22	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.018	0.0059	mg/Kg	☼	06/05/18 15:30	06/06/18 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	06/13/18 10:30	06/13/18 17:23	1
pH	7.8		0.20	0.20	SU			06/08/18 15:20	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1

Lab Sample ID: 500-146311-6

Date Collected: 06/01/18 10:40

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
2-Butanone (MEK)	0.0034	J	0.0042	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Acetone	0.045		0.017	0.0072	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 134	06/01/18 17:41	06/08/18 13:48	1
4-Bromofluorobenzene (Surr)	106		75 - 131	06/01/18 17:41	06/08/18 13:48	1
Dibromofluoromethane	81		75 - 126	06/01/18 17:41	06/08/18 13:48	1
Toluene-d8 (Surr)	96		75 - 124	06/01/18 17:41	06/08/18 13:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1

Lab Sample ID: 500-146311-6

Date Collected: 06/01/18 10:40

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1

Lab Sample ID: 500-146311-6

Date Collected: 06/01/18 10:40

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	06/06/18 07:13	06/08/18 14:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		25 - 139				06/06/18 07:13	06/08/18 14:31	1
2-Fluorobiphenyl	90		44 - 121				06/06/18 07:13	06/08/18 14:31	1
2-Fluorophenol	118		46 - 133				06/06/18 07:13	06/08/18 14:31	1
Nitrobenzene-d5	86		41 - 120				06/06/18 07:13	06/08/18 14:31	1
Phenol-d5	108		46 - 125				06/06/18 07:13	06/08/18 14:31	1
Terphenyl-d14	109		35 - 160				06/06/18 07:13	06/08/18 14:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Arsenic	10		0.60	0.21	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Barium	71		0.60	0.069	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Beryllium	0.74		0.24	0.056	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Boron	8.8		3.0	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Cadmium	0.21	B	0.12	0.022	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Calcium	3200	B	12	2.0	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Chromium	19		0.60	0.30	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Cobalt	13		0.30	0.079	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Copper	27		0.60	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Iron	23000		12	6.3	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Lead	22		0.30	0.14	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Magnesium	4700		6.0	3.0	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Manganese	300		0.60	0.087	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Nickel	34		0.60	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Potassium	2200		30	11	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Selenium	1.4		0.60	0.35	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Silver	0.26	J	0.30	0.078	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Sodium	140		60	8.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Thallium	0.42	J	0.60	0.30	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Vanadium	26		0.30	0.071	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1
Zinc	77		1.2	0.53	mg/Kg	☼	06/05/18 08:00	06/06/18 02:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.46		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 22:17	1
Lead	0.0082		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 22:17	1
Manganese	8.5		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:17	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1

Lab Sample ID: 500-146311-6

Date Collected: 06/01/18 10:40

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011	J	0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:13	1
Barium	0.20	J	0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:13	1
Boron	0.10		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:13	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:13	1
Calcium	17		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:13	1
Chromium	0.057		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:13	1
Cobalt	0.015	J	0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:13	1
Iron	58		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:13	1
Lead	0.019		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:13	1
Manganese	0.43		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:13	1
Nickel	0.061		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:13	1
Potassium	15		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:13	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:13	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:13	1
Zinc	0.19	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:13	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:27	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042	B	0.018	0.0061	mg/Kg	☼	06/05/18 15:30	06/06/18 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	06/13/18 10:30	06/13/18 17:23	1
pH	7.7		0.20	0.20	SU			06/08/18 15:22	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1 Dup

Lab Sample ID: 500-146311-7

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Acetone	0.057		0.017	0.0072	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	06/01/18 17:41	06/06/18 20:18	1
4-Bromofluorobenzene (Surr)	122		75 - 131	06/01/18 17:41	06/06/18 20:18	1
Dibromofluoromethane	124		75 - 126	06/01/18 17:41	06/06/18 20:18	1
Toluene-d8 (Surr)	109		75 - 124	06/01/18 17:41	06/06/18 20:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1 Dup

Lab Sample ID: 500-146311-7

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1 Dup

Lab Sample ID: 500-146311-7

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/06/18 07:13	06/08/18 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		25 - 139				06/06/18 07:13	06/08/18 15:11	1
2-Fluorobiphenyl	85		44 - 121				06/06/18 07:13	06/08/18 15:11	1
2-Fluorophenol	116		46 - 133				06/06/18 07:13	06/08/18 15:11	1
Nitrobenzene-d5	86		41 - 120				06/06/18 07:13	06/08/18 15:11	1
Phenol-d5	98		46 - 125				06/06/18 07:13	06/08/18 15:11	1
Terphenyl-d14	101		35 - 160				06/06/18 07:13	06/08/18 15:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Arsenic	5.8		0.58	0.20	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Barium	33		0.58	0.066	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Beryllium	0.46		0.23	0.054	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Boron	7.1		2.9	0.27	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Calcium	3800	B	12	2.0	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Chromium	13		0.58	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Cobalt	7.5		0.29	0.075	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Copper	15		0.58	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Iron	15000		12	6.0	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Lead	11		0.29	0.13	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Magnesium	4300		5.8	2.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Manganese	170		0.58	0.083	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Nickel	21		0.58	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Potassium	1500		29	10	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Selenium	0.90		0.58	0.34	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Silver	0.19	J	0.29	0.074	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Sodium	200		58	8.5	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Vanadium	16		0.29	0.068	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1
Zinc	43		1.2	0.51	mg/Kg	☼	06/05/18 08:00	06/06/18 02:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:21	06/07/18 22:21	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:21	1
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 22:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 22:21	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-1 Dup

Lab Sample ID: 500-146311-7

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.8		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:21	1
Nickel	0.017	J	0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.049	J	0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:17	1
Barium	0.41	J	0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:17	1
Beryllium	0.0051		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:17	1
Boron	0.16		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:17	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:17	1
Calcium	18		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:17	1
Chromium	0.12		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:17	1
Cobalt	0.040		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:17	1
Iron	140		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:17	1
Lead	0.070		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:17	1
Manganese	0.70		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:17	1
Nickel	0.15		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:17	1
Potassium	26		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:17	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:17	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:17	1
Zinc	0.43	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:21	06/08/18 11:16	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:31	1
Thallium	0.0032		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:31	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00032		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039	B	0.018	0.0060	mg/Kg	☼	06/05/18 15:30	06/06/18 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/13/18 10:30	06/13/18 17:24	1
pH	7.7		0.20	0.20	SU			06/08/18 15:24	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-2

Lab Sample ID: 500-146311-8

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Acetone	0.022		0.017	0.0074	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Carbon disulfide	<0.0043		0.0043	0.00088	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	06/01/18 17:41	06/07/18 15:14	1
4-Bromofluorobenzene (Surr)	110		75 - 131	06/01/18 17:41	06/07/18 15:14	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/07/18 15:14	1
Toluene-d8 (Surr)	98		75 - 124	06/01/18 17:41	06/07/18 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-2

Lab Sample ID: 500-146311-8

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-2

Lab Sample ID: 500-146311-8

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Pentachlorophenol	<0.79		0.79	0.62	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	06/06/18 07:13	06/08/18 15:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		25 - 139				06/06/18 07:13	06/08/18 15:40	1
2-Fluorobiphenyl	84		44 - 121				06/06/18 07:13	06/08/18 15:40	1
2-Fluorophenol	118		46 - 133				06/06/18 07:13	06/08/18 15:40	1
Nitrobenzene-d5	86		41 - 120				06/06/18 07:13	06/08/18 15:40	1
Phenol-d5	99		46 - 125				06/06/18 07:13	06/08/18 15:40	1
Terphenyl-d14	102		35 - 160				06/06/18 07:13	06/08/18 15:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Arsenic	9.8		0.55	0.19	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Barium	52		0.55	0.063	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Beryllium	0.60		0.22	0.051	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Boron	8.8		2.7	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Cadmium	0.22	B	0.11	0.020	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Calcium	13000	B	11	1.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Chromium	15		0.55	0.27	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Cobalt	10		0.27	0.072	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Copper	24		0.55	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Iron	20000		11	5.7	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Lead	18		0.27	0.13	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Magnesium	8400		5.5	2.7	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Manganese	230		0.55	0.080	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Nickel	27		0.55	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Potassium	1900		27	9.7	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Selenium	1.1		0.55	0.32	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Silver	0.21	J	0.27	0.071	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Sodium	57		55	8.1	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Vanadium	22		0.27	0.065	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1
Zinc	66		1.1	0.48	mg/Kg	☼	06/05/18 08:00	06/06/18 02:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 22:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 22:25	1
Manganese	7.2		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:25	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-2

Lab Sample ID: 500-146311-8

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.016	J	0.050	0.010	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Barium	0.23	J	0.50	0.050	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Boron	0.13		0.10	0.050	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Calcium	18		2.5	0.50	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Chromium	0.070		0.025	0.010	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Cobalt	0.025		0.025	0.010	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Iron	70		0.40	0.20	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Lead	0.020		0.0075	0.0075	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Manganese	0.87		0.025	0.010	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Nickel	0.073		0.025	0.010	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Potassium	20		2.5	0.50	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Selenium	<0.050		0.050	0.020	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Silver	<0.025		0.025	0.010	mg/L	-	06/06/18 15:17	06/07/18 20:21	1
Zinc	0.31	J B	0.50	0.020	mg/L	-	06/06/18 15:17	06/07/18 20:21	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	06/06/18 15:17	06/07/18 18:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	06/06/18 15:17	06/07/18 18:35	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	06/07/18 08:25	06/07/18 14:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035	B	0.018	0.0061	mg/Kg	☼	06/05/18 15:30	06/06/18 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.16	mg/Kg	☼	06/13/18 10:30	06/13/18 17:24	1
pH	8.1		0.20	0.20	SU			06/08/18 15:26	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-3

Lab Sample ID: 500-146311-9

Date Collected: 06/01/18 10:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Acetone	0.032		0.016	0.0071	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	06/01/18 17:41	06/06/18 21:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		70 - 134	06/01/18 17:41	06/06/18 21:13	1
4-Bromofluorobenzene (Surr)	104		75 - 131	06/01/18 17:41	06/06/18 21:13	1
Dibromofluoromethane	108		75 - 126	06/01/18 17:41	06/06/18 21:13	1
Toluene-d8 (Surr)	112		75 - 124	06/01/18 17:41	06/06/18 21:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-3

Lab Sample ID: 500-146311-9

Date Collected: 06/01/18 10:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
4-Chloroaniline	<0.79		0.79	0.19	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Benzo[a]pyrene	0.026	J	0.039	0.0076	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-3

Lab Sample ID: 500-146311-9

Date Collected: 06/01/18 10:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	06/06/18 07:13	06/08/18 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	92		25 - 139	06/06/18 07:13	06/08/18 16:09	1
2-Fluorobiphenyl	88		44 - 121	06/06/18 07:13	06/08/18 16:09	1
2-Fluorophenol	120		46 - 133	06/06/18 07:13	06/08/18 16:09	1
Nitrobenzene-d5	90		41 - 120	06/06/18 07:13	06/08/18 16:09	1
Phenol-d5	102		46 - 125	06/06/18 07:13	06/08/18 16:09	1
Terphenyl-d14	103		35 - 160	06/06/18 07:13	06/08/18 16:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Arsenic	8.9		0.56	0.19	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Barium	69		0.56	0.063	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Beryllium	0.58		0.22	0.052	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Boron	6.4		2.8	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Cadmium	0.27	B	0.11	0.020	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Calcium	8200	B	11	1.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Chromium	14		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Cobalt	11		0.28	0.073	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Copper	22		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Iron	19000		11	5.8	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Lead	21		0.28	0.13	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Magnesium	6900		5.6	2.8	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Manganese	560		0.56	0.081	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Nickel	29		0.56	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Potassium	1700		28	9.9	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Selenium	1.1		0.56	0.33	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Silver	0.26	J	0.28	0.072	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Sodium	44	J	56	8.2	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Vanadium	20		0.28	0.066	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1
Zinc	71		1.1	0.49	mg/Kg	☼	06/05/18 08:00	06/06/18 02:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:21	06/07/18 22:29	1
Iron	1.6		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 22:29	1
Lead	0.0081		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 22:29	1
Manganese	9.6		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:29	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B30-3

Lab Sample ID: 500-146311-9

Date Collected: 06/01/18 10:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.051		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.044	J	0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:33	1
Barium	0.49	J	0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:33	1
Beryllium	0.0048		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:33	1
Boron	0.13		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:33	1
Calcium	14		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:33	1
Chromium	0.10		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:33	1
Cobalt	0.046		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:33	1
Iron	130		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:33	1
Lead	0.079		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:33	1
Manganese	1.4		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:33	1
Nickel	0.14		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:33	1
Potassium	22		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:33	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:33	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:33	1
Zinc	0.43	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:21	06/08/18 11:28	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:47	1
Thallium	0.0023		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:47	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00038		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028	B	0.017	0.0057	mg/Kg	☼	06/05/18 15:30	06/06/18 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	06/13/18 10:30	06/13/18 17:25	1
pH	7.5		0.20	0.20	SU			06/08/18 15:28	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B44

Lab Sample ID: 500-146311-10

Date Collected: 06/01/18 11:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Acetone	0.035		0.018	0.0079	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1
Xylenes, Total	<0.0037		0.0037	0.00058	mg/Kg	☼	06/01/18 17:41	06/06/18 21:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 134	06/01/18 17:41	06/06/18 21:41	1
4-Bromofluorobenzene (Surr)	109		75 - 131	06/01/18 17:41	06/06/18 21:41	1
Dibromofluoromethane	109		75 - 126	06/01/18 17:41	06/06/18 21:41	1
Toluene-d8 (Surr)	112		75 - 124	06/01/18 17:41	06/06/18 21:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B44

Lab Sample ID: 500-146311-10

Date Collected: 06/01/18 11:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Benzo[a]anthracene	0.0065	J	0.037	0.0050	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Benzo[a]pyrene	0.026	J	0.037	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Fluoranthene	0.012	J	0.037	0.0069	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B44

Lab Sample ID: 500-146311-10

Date Collected: 06/01/18 11:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.024	J	0.037	0.0097	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Phenanthrene	0.0077	J	0.037	0.0052	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Pyrene	0.012	J	0.037	0.0074	mg/Kg	☼	06/06/18 07:13	06/08/18 17:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		25 - 139				06/06/18 07:13	06/08/18 17:37	1
2-Fluorobiphenyl	85		44 - 121				06/06/18 07:13	06/08/18 17:37	1
2-Fluorophenol	115		46 - 133				06/06/18 07:13	06/08/18 17:37	1
Nitrobenzene-d5	87		41 - 120				06/06/18 07:13	06/08/18 17:37	1
Phenol-d5	99		46 - 125				06/06/18 07:13	06/08/18 17:37	1
Terphenyl-d14	101		35 - 160				06/06/18 07:13	06/08/18 17:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.24	J	1.1	0.21	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Arsenic	8.8		0.54	0.18	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Barium	93		0.54	0.061	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Beryllium	0.57		0.21	0.050	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Boron	9.0		2.7	0.25	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Cadmium	0.38	B	0.11	0.019	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Calcium	30000	B	11	1.8	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Chromium	14		0.54	0.27	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Cobalt	12		0.27	0.070	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Copper	20		0.54	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Iron	20000		11	5.6	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Lead	17		0.27	0.12	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Magnesium	17000		5.4	2.7	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Manganese	460		0.54	0.078	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Nickel	27		0.54	0.16	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Potassium	1900		27	9.5	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Selenium	1.2		0.54	0.32	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Silver	0.23	J	0.27	0.069	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Sodium	1300		54	7.9	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Vanadium	23		0.27	0.063	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1
Zinc	72		1.1	0.47	mg/Kg	☼	06/05/18 08:00	06/06/18 03:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:21	06/07/18 22:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:21	06/07/18 22:34	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:34	1
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 22:34	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B44

Lab Sample ID: 500-146311-10

Date Collected: 06/01/18 11:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 22:34	1
Manganese	7.7		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:34	1
Nickel	0.032		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 22:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.054		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:37	1
Barium	0.62		0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:37	1
Beryllium	0.0045		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:37	1
Boron	0.15		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:37	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:37	1
Calcium	27		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:37	1
Chromium	0.12		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:37	1
Cobalt	0.060		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:37	1
Iron	160		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:37	1
Lead	0.095		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:37	1
Manganese	1.7		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:37	1
Nickel	0.15		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:37	1
Potassium	24		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:37	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:37	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:37	1
Zinc	0.50	B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:21	06/08/18 11:32	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 18:51	1
Thallium	0.0034		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 18:51	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00041		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034	B	0.019	0.0063	mg/Kg	☼	06/05/18 15:30	06/06/18 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	06/13/18 10:30	06/13/18 17:25	1
pH	7.4		0.20	0.20	SU			06/08/18 15:30	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B48

Lab Sample ID: 500-146311-15

Date Collected: 06/01/18 12:10

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	06/01/18 17:41	06/06/18 23:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	06/01/18 17:41	06/06/18 23:59	1
4-Bromofluorobenzene (Surr)	105		75 - 131	06/01/18 17:41	06/06/18 23:59	1
Dibromofluoromethane	110		75 - 126	06/01/18 17:41	06/06/18 23:59	1
Toluene-d8 (Surr)	115		75 - 124	06/01/18 17:41	06/06/18 23:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B48

Lab Sample ID: 500-146311-15

Date Collected: 06/01/18 12:10

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Anthracene	0.0078	J	0.035	0.0059	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Benzo[a]anthracene	0.065		0.035	0.0048	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Benzo[a]pyrene	0.089		0.035	0.0068	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Benzo[b]fluoranthene	0.16		0.035	0.0076	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Benzo[g,h,i]perylene	0.050		0.035	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Benzo[k]fluoranthene	0.048		0.035	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Carbazole	0.12	J	0.18	0.088	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Chrysene	0.097		0.035	0.0096	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Dibenz(a,h)anthracene	0.013	J	0.035	0.0068	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Fluoranthene	0.16		0.035	0.0066	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B48

Lab Sample ID: 500-146311-15

Date Collected: 06/01/18 12:10

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.047		0.035	0.0092	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Phenanthrene	0.059		0.035	0.0049	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Pyrene	0.14		0.035	0.0070	mg/Kg	☼	06/06/18 07:13	06/08/18 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		25 - 139				06/06/18 07:13	06/08/18 16:50	1
2-Fluorobiphenyl	97		44 - 121				06/06/18 07:13	06/08/18 16:50	1
2-Fluorophenol	116		46 - 133				06/06/18 07:13	06/08/18 16:50	1
Nitrobenzene-d5	87		41 - 120				06/06/18 07:13	06/08/18 16:50	1
Phenol-d5	105		46 - 125				06/06/18 07:13	06/08/18 16:50	1
Terphenyl-d14	109		35 - 160				06/06/18 07:13	06/08/18 16:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.0	0.20	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Arsenic	4.3		0.51	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Barium	54		0.51	0.058	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Beryllium	0.38		0.20	0.047	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Boron	7.8		2.5	0.24	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Cadmium	0.27	B	0.10	0.018	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Calcium	130000	B	100	17	mg/Kg	☼	06/05/18 08:00	06/06/18 21:49	10
Chromium	9.2		0.51	0.25	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Cobalt	4.4		0.25	0.066	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Copper	9.9		0.51	0.14	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Iron	12000		10	5.3	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Lead	38		0.25	0.12	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Magnesium	82000		51	25	mg/Kg	☼	06/05/18 08:00	06/06/18 21:49	10
Manganese	310		0.51	0.074	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Nickel	10		0.51	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Potassium	1100		25	9.0	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Selenium	0.54		0.51	0.30	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Silver	0.14	J	0.25	0.065	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Sodium	1100		51	7.5	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Vanadium	15		0.25	0.060	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1
Zinc	41		1.0	0.45	mg/Kg	☼	06/05/18 08:00	06/06/18 03:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 22:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 22:50	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B48

Lab Sample ID: 500-146311-15

Date Collected: 06/01/18 12:10

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:53	1
Barium	0.078	J	0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:53	1
Boron	<0.10		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:53	1
Calcium	11		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:53	1
Chromium	0.024	J	0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:53	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:53	1
Iron	16		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:53	1
Lead	0.025		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:53	1
Manganese	0.094		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:53	1
Nickel	0.011	J	0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:53	1
Potassium	4.5		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:53	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:53	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:53	1
Zinc	0.11	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:53	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 19:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 19:07	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0083	J B	0.016	0.0052	mg/Kg	☼	06/05/18 15:30	06/06/18 17:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/13/18 10:30	06/13/18 17:26	1
pH	8.9		0.20	0.20	SU			06/08/18 15:38	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49

Lab Sample ID: 500-146311-16

Date Collected: 06/01/18 12:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Acetone	0.020		0.018	0.0079	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Chloroethane	<0.0045 *		0.0045	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 134	06/01/18 17:41	06/07/18 00:26	1
4-Bromofluorobenzene (Surr)	106		75 - 131	06/01/18 17:41	06/07/18 00:26	1
Dibromofluoromethane	94		75 - 126	06/01/18 17:41	06/07/18 00:26	1
Toluene-d8 (Surr)	111		75 - 124	06/01/18 17:41	06/07/18 00:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49

Lab Sample ID: 500-146311-16

Date Collected: 06/01/18 12:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2-Methylnaphthalene	<0.070		0.070	0.0063	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Acenaphthene	0.011	J	0.034	0.0062	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Acenaphthylene	0.0066	J	0.034	0.0046	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Anthracene	0.040		0.034	0.0058	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Benzo[a]anthracene	0.29		0.034	0.0046	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Benzo[a]pyrene	0.35		0.034	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Benzo[b]fluoranthene	0.60		0.034	0.0075	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Benzo[g,h,i]perylene	0.15		0.034	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Benzo[k]fluoranthene	0.20		0.034	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Carbazole	0.13	J	0.17	0.086	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Chrysene	0.39		0.034	0.0094	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Dibenz(a,h)anthracene	0.034		0.034	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Fluoranthene	0.66		0.034	0.0064	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Fluorene	0.010	J	0.034	0.0049	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49

Lab Sample ID: 500-146311-16

Date Collected: 06/01/18 12:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.14		0.034	0.0089	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Pentachlorophenol	<0.70		0.70	0.55	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Phenanthrene	0.23		0.034	0.0048	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Pyrene	0.65		0.034	0.0069	mg/Kg	☼	06/06/18 07:13	06/08/18 17:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	81		25 - 139				06/06/18 07:13	06/08/18 17:18	1
2-Fluorobiphenyl	92		44 - 121				06/06/18 07:13	06/08/18 17:18	1
2-Fluorophenol	115		46 - 133				06/06/18 07:13	06/08/18 17:18	1
Nitrobenzene-d5	84		41 - 120				06/06/18 07:13	06/08/18 17:18	1
Phenol-d5	99		46 - 125				06/06/18 07:13	06/08/18 17:18	1
Terphenyl-d14	125		35 - 160				06/06/18 07:13	06/08/18 17:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Arsenic	2.7		0.52	0.18	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Barium	34		0.52	0.059	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Beryllium	0.24		0.21	0.049	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Boron	14		2.6	0.24	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Cadmium	0.24	B	0.10	0.019	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Calcium	180000	B	100	18	mg/Kg	☼	06/05/18 08:00	06/06/18 21:53	10
Chromium	15		0.52	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Cobalt	2.3		0.26	0.068	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Copper	9.4		0.52	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Iron	6800		10	5.4	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Lead	100		0.26	0.12	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Magnesium	110000		52	26	mg/Kg	☼	06/05/18 08:00	06/06/18 21:53	10
Manganese	290		0.52	0.075	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Nickel	5.8		0.52	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Potassium	1000		26	9.2	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Sodium	430		52	7.7	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Vanadium	8.8		0.26	0.061	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1
Zinc	47		1.0	0.46	mg/Kg	☼	06/05/18 08:00	06/06/18 03:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 23:02	1
Lead	0.012		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 23:02	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49

Lab Sample ID: 500-146311-16

Date Collected: 06/01/18 12:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 20:57	1
Barium	<0.50		0.50	0.050	mg/L		06/06/18 15:17	06/07/18 20:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 20:57	1
Boron	<0.10		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 20:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 20:57	1
Calcium	8.7		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:57	1
Chromium	0.021	J	0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:57	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:57	1
Iron	7.5		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 20:57	1
Lead	0.027		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 20:57	1
Manganese	0.054		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:57	1
Nickel	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:57	1
Potassium	3.2		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 20:57	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 20:57	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 20:57	1
Zinc	0.038	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 20:57	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 19:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 19:11	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	B	0.017	0.0056	mg/Kg	☼	06/05/18 15:30	06/06/18 17:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	06/13/18 10:30	06/13/18 17:26	1
pH	9.0		0.20	0.20	SU			06/08/18 15:40	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49 Dup

Lab Sample ID: 500-146311-17

Date Collected: 06/01/18 12:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Acetone	0.025		0.019	0.0082	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Chloroethane	<0.0047 *		0.0047	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 00:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	06/01/18 17:41	06/07/18 00:54	1
4-Bromofluorobenzene (Surr)	107		75 - 131	06/01/18 17:41	06/07/18 00:54	1
Dibromofluoromethane	106		75 - 126	06/01/18 17:41	06/07/18 00:54	1
Toluene-d8 (Surr)	111		75 - 124	06/01/18 17:41	06/07/18 00:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49 Dup

Lab Sample ID: 500-146311-17

Date Collected: 06/01/18 12:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
4-Chloroaniline	<0.71		0.71	0.16	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Acenaphthene	0.012	J	0.035	0.0063	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Acenaphthylene	0.011	J	0.035	0.0046	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Anthracene	0.042		0.035	0.0059	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Benzo[a]anthracene	0.45		0.035	0.0047	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Benzo[a]pyrene	0.58		0.035	0.0068	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Benzo[b]fluoranthene	1.1		0.035	0.0076	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Benzo[g,h,i]perylene	0.49		0.035	0.011	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Benzo[k]fluoranthene	0.33		0.035	0.010	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Bis(2-ethylhexyl) phthalate	0.083	J	0.18	0.064	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Carbazole	0.16	J	0.18	0.088	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Chrysene	0.69		0.035	0.0096	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Dibenz(a,h)anthracene	0.10		0.035	0.0068	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Fluoranthene	0.84		0.035	0.0065	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Fluorene	0.012	J	0.035	0.0049	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49 Dup

Lab Sample ID: 500-146311-17

Date Collected: 06/01/18 12:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.39		0.035	0.0091	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Naphthalene	0.0073	J	0.035	0.0054	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Phenanthrene	0.32		0.035	0.0049	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Phenol	<0.18		0.18	0.078	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Pyrene	1.5		0.035	0.0070	mg/Kg	☼	06/06/18 07:13	06/11/18 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		25 - 139				06/06/18 07:13	06/11/18 18:20	1
2-Fluorobiphenyl	91		44 - 121				06/06/18 07:13	06/11/18 18:20	1
2-Fluorophenol	118		46 - 133				06/06/18 07:13	06/11/18 18:20	1
Nitrobenzene-d5	84		41 - 120				06/06/18 07:13	06/11/18 18:20	1
Phenol-d5	102		46 - 125				06/06/18 07:13	06/11/18 18:20	1
Terphenyl-d14	187	X	35 - 160				06/06/18 07:13	06/11/18 18:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.0	0.20	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Arsenic	2.3		0.51	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Barium	26		0.51	0.058	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Beryllium	0.25		0.20	0.047	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Boron	16		2.5	0.24	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Cadmium	0.25	B	0.10	0.018	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Calcium	200000	B	100	17	mg/Kg	☼	06/05/18 08:00	06/06/18 21:57	10
Chromium	18		0.51	0.25	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Cobalt	2.3		0.25	0.067	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Copper	11		0.51	0.14	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Iron	7100		10	5.3	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Lead	86		0.25	0.12	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Magnesium	120000		51	25	mg/Kg	☼	06/05/18 08:00	06/06/18 21:57	10
Manganese	280		0.51	0.074	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Nickel	6.6		0.51	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Potassium	1100		25	9.0	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Selenium	<0.51		0.51	0.30	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Silver	<0.25		0.25	0.066	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Sodium	400		51	7.5	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Vanadium	9.1		0.25	0.060	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1
Zinc	74		1.0	0.45	mg/Kg	☼	06/05/18 08:00	06/06/18 03:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:21	06/07/18 23:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:21	06/07/18 23:07	1
Manganese	1.2		0.025	0.010	mg/L		06/06/18 15:21	06/07/18 23:07	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B49 Dup

Lab Sample ID: 500-146311-17

Date Collected: 06/01/18 12:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 21:01	1
Barium	0.14	J	0.50	0.050	mg/L		06/06/18 15:17	06/07/18 21:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 21:01	1
Boron	0.072	J	0.10	0.050	mg/L		06/06/18 15:17	06/07/18 21:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 21:01	1
Calcium	16		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 21:01	1
Chromium	0.045		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:01	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:01	1
Iron	30		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 21:01	1
Lead	0.12		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 21:01	1
Manganese	0.19		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:01	1
Nickel	0.026		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:01	1
Potassium	9.4		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 21:01	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 21:01	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:01	1
Zinc	0.22	J B	0.50	0.020	mg/L		06/06/18 15:17	06/07/18 21:01	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 19:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 19:15	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	B	0.016	0.0054	mg/Kg	☼	06/05/18 15:30	06/06/18 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	06/13/18 10:30	06/13/18 17:27	1
pH	8.9		0.20	0.20	SU			06/08/18 15:42	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B50

Lab Sample ID: 500-146311-18

Date Collected: 06/01/18 12:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00080	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00077	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
1,1-Dichloroethane	<0.0024		0.0024	0.00082	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
1,1-Dichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
1,2-Dichloroethane	<0.0060		0.0060	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
1,2-Dichloropropane	<0.0024		0.0024	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
2-Butanone (MEK)	<0.0060		0.0060	0.0027	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
2-Hexanone	<0.0060		0.0060	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
4-Methyl-2-pentanone (MIBK)	<0.0060		0.0060	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Acetone	0.052		0.024	0.010	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Benzene	<0.0024		0.0024	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Bromodichloromethane	<0.0024		0.0024	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Bromoform	<0.0024		0.0024	0.00070	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Bromomethane	<0.0060		0.0060	0.0023	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Carbon disulfide	<0.0060		0.0060	0.0012	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Carbon tetrachloride	<0.0024		0.0024	0.00070	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Chlorobenzene	<0.0024		0.0024	0.00088	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Chloroethane	<0.0060	*	0.0060	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Chloroform	<0.0024		0.0024	0.00083	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Chloromethane	<0.0060		0.0060	0.0024	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00067	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00072	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Dibromochloromethane	<0.0024		0.0024	0.00078	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Ethylbenzene	<0.0024		0.0024	0.0011	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00070	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Methylene Chloride	<0.0060		0.0060	0.0024	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Styrene	<0.0024		0.0024	0.00072	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Tetrachloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Toluene	<0.0024		0.0024	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Trichloroethene	<0.0024		0.0024	0.00081	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1
Xylenes, Total	<0.0048		0.0048	0.00077	mg/Kg	☼	06/01/18 17:41	06/07/18 01:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	06/01/18 17:41	06/07/18 01:22	1
4-Bromofluorobenzene (Surr)	122		75 - 131	06/01/18 17:41	06/07/18 01:22	1
Dibromofluoromethane	107		75 - 126	06/01/18 17:41	06/07/18 01:22	1
Toluene-d8 (Surr)	112		75 - 124	06/01/18 17:41	06/07/18 01:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B50

Lab Sample ID: 500-146311-18

Date Collected: 06/01/18 12:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2,4-Dinitrophenol	<0.69		0.69	0.61	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
2-Nitrophenol	<0.34		0.34	0.081	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.28	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
4-Nitrophenol	<0.69		0.69	0.33	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Anthracene	<0.034		0.034	0.0058	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Benzo[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Benzo[a]pyrene	<0.034		0.034	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Benzo[b]fluoranthene	<0.034		0.034	0.0074	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Carbazole	<0.17		0.17	0.086	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Chrysene	<0.034		0.034	0.0094	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Fluoranthene	<0.034		0.034	0.0064	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Hexachlorobenzene	<0.069		0.069	0.0080	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B50

Lab Sample ID: 500-146311-18

Date Collected: 06/01/18 12:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0089	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
N-Nitrosodi-n-propylamine	<0.069		0.069	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Phenanthrene	<0.034		0.034	0.0048	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Phenol	<0.17		0.17	0.076	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Pyrene	<0.034		0.034	0.0068	mg/Kg	☼	06/06/18 07:13	06/08/18 12:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		25 - 139				06/06/18 07:13	06/08/18 12:45	1
2-Fluorobiphenyl	89		44 - 121				06/06/18 07:13	06/08/18 12:45	1
2-Fluorophenol	119		46 - 133				06/06/18 07:13	06/08/18 12:45	1
Nitrobenzene-d5	90		41 - 120				06/06/18 07:13	06/08/18 12:45	1
Phenol-d5	100		46 - 125				06/06/18 07:13	06/08/18 12:45	1
Terphenyl-d14	106		35 - 160				06/06/18 07:13	06/08/18 12:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.99		0.99	0.19	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Arsenic	0.67		0.49	0.17	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Barium	5.7		0.49	0.056	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Beryllium	0.092	J	0.20	0.046	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Boron	5.8		2.5	0.23	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Cadmium	0.089	J B	0.099	0.018	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Calcium	270000	B	99	17	mg/Kg	☼	06/05/18 08:00	06/06/18 22:01	10
Chromium	1.1		0.49	0.24	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Cobalt	0.58		0.25	0.065	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Copper	1.4		0.49	0.14	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Iron	3500		9.9	5.1	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Lead	0.64		0.25	0.11	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Magnesium	170000		49	24	mg/Kg	☼	06/05/18 08:00	06/06/18 22:01	10
Manganese	240		0.49	0.072	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Nickel	1.8		0.49	0.14	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Potassium	520		25	8.7	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Selenium	<0.49		0.49	0.29	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Silver	<0.25		0.25	0.064	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Sodium	160		49	7.3	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Thallium	<0.49		0.49	0.25	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Vanadium	2.3		0.25	0.058	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1
Zinc	2.6		0.99	0.43	mg/Kg	☼	06/05/18 08:00	06/06/18 03:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 21:05	1
Barium	<0.50		0.50	0.050	mg/L		06/06/18 15:17	06/07/18 21:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 21:05	1
Boron	<0.10		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 21:05	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B50

Lab Sample ID: 500-146311-18

Date Collected: 06/01/18 12:55

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 21:05	1
Calcium	6.5		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 21:05	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:05	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:05	1
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 21:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 21:05	1
Manganese	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:05	1
Nickel	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:05	1
Potassium	<2.5		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 21:05	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 21:05	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:05	1
Zinc	<0.50		0.50	0.020	mg/L		06/06/18 15:17	06/07/18 21:05	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 19:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 19:19	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0078	J B	0.016	0.0055	mg/Kg	☼	06/05/18 15:30	06/06/18 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/13/18 10:30	06/13/18 17:28	1
pH	8.5		0.20	0.20	SU			06/08/18 15:44	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B51

Lab Sample ID: 500-146311-19

Date Collected: 06/01/18 13:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 94.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00068	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00091	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
1,1-Dichloroethane	<0.0021		0.0021	0.00073	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
1,1-Dichloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
1,2-Dichloroethane	<0.0053		0.0053	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00075	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
2-Butanone (MEK)	<0.0053		0.0053	0.0024	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
2-Hexanone	<0.0053		0.0053	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Acetone	0.012	J	0.021	0.0093	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Bromoform	<0.0021		0.0021	0.00062	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Bromomethane	<0.0053	*	0.0053	0.0020	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Carbon tetrachloride	<0.0021		0.0021	0.00062	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Chlorobenzene	<0.0021		0.0021	0.00078	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Chloroform	<0.0021		0.0021	0.00074	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00064	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Dibromochloromethane	<0.0021		0.0021	0.00070	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Tetrachloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Toluene	<0.0021		0.0021	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00094	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00075	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Trichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Vinyl chloride	<0.0021		0.0021	0.00094	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1
Xylenes, Total	<0.0043		0.0043	0.00068	mg/Kg	☼	06/01/18 17:41	06/08/18 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	06/01/18 17:41	06/08/18 14:15	1
4-Bromofluorobenzene (Surr)	104		75 - 131	06/01/18 17:41	06/08/18 14:15	1
Dibromofluoromethane	79		75 - 126	06/01/18 17:41	06/08/18 14:15	1
Toluene-d8 (Surr)	98		75 - 124	06/01/18 17:41	06/08/18 14:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B51

Lab Sample ID: 500-146311-19

Date Collected: 06/01/18 13:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 94.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Acenaphthylene	<0.034		0.034	0.0046	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Anthracene	<0.034		0.034	0.0058	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Benzo[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Benzo[a]pyrene	<0.034		0.034	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Benzo[b]fluoranthene	<0.034		0.034	0.0075	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Carbazole	<0.17		0.17	0.086	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Chrysene	<0.034		0.034	0.0094	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Fluoranthene	<0.034		0.034	0.0064	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Fluorene	<0.034		0.034	0.0049	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B51

Lab Sample ID: 500-146311-19

Date Collected: 06/01/18 13:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 94.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0089	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Pentachlorophenol	<0.70		0.70	0.55	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Phenanthrene	<0.034		0.034	0.0048	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Pyrene	<0.034		0.034	0.0069	mg/Kg	☼	06/06/18 07:13	06/08/18 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		25 - 139				06/06/18 07:13	06/08/18 13:14	1
2-Fluorobiphenyl	87		44 - 121				06/06/18 07:13	06/08/18 13:14	1
2-Fluorophenol	119		46 - 133				06/06/18 07:13	06/08/18 13:14	1
Nitrobenzene-d5	89		41 - 120				06/06/18 07:13	06/08/18 13:14	1
Phenol-d5	99		46 - 125				06/06/18 07:13	06/08/18 13:14	1
Terphenyl-d14	103		35 - 160				06/06/18 07:13	06/08/18 13:14	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Arsenic	0.70		0.51	0.18	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Barium	41		0.51	0.059	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Beryllium	0.096	J	0.21	0.048	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Boron	6.4		2.6	0.24	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Cadmium	0.10	B	0.10	0.018	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Calcium	260000	B	100	17	mg/Kg	☼	06/05/18 08:00	06/06/18 22:05	10
Chromium	1.1		0.51	0.25	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Cobalt	2.3		0.26	0.067	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Copper	1.8		0.51	0.14	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Iron	6700		10	5.3	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Lead	0.58		0.26	0.12	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Magnesium	160000		51	25	mg/Kg	☼	06/05/18 08:00	06/06/18 22:05	10
Manganese	510		0.51	0.074	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Nickel	2.8		0.51	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Potassium	450		26	9.1	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Selenium	<0.51		0.51	0.30	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Silver	<0.26		0.26	0.066	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Sodium	320		51	7.6	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Thallium	<0.51		0.51	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Vanadium	1.7		0.26	0.061	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1
Zinc	2.4		1.0	0.45	mg/Kg	☼	06/05/18 08:00	06/06/18 03:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:17	06/07/18 21:09	1
Barium	<0.50		0.50	0.050	mg/L		06/06/18 15:17	06/07/18 21:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:17	06/07/18 21:09	1
Boron	<0.10		0.10	0.050	mg/L		06/06/18 15:17	06/07/18 21:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B51

Lab Sample ID: 500-146311-19

Date Collected: 06/01/18 13:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 94.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:17	06/07/18 21:09	1
Calcium	7.8		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 21:09	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:09	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:09	1
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:17	06/07/18 21:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:17	06/07/18 21:09	1
Manganese	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:09	1
Nickel	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:09	1
Potassium	<2.5		2.5	0.50	mg/L		06/06/18 15:17	06/07/18 21:09	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:17	06/07/18 21:09	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:17	06/07/18 21:09	1
Zinc	<0.50		0.50	0.020	mg/L		06/06/18 15:17	06/07/18 21:09	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:17	06/07/18 19:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:17	06/07/18 19:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0057	mg/Kg	☼	06/05/18 15:30	06/06/18 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/13/18 10:30	06/13/18 17:28	1
pH	8.2		0.20	0.20	SU			06/08/18 15:46	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B81

Lab Sample ID: 500-146311-21

Date Collected: 06/01/18 13:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Acetone	0.026		0.018	0.0077	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Bromomethane	<0.0044	*	0.0044	0.0017	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/01/18 17:41	06/07/18 13:52	1
4-Bromofluorobenzene (Surr)	108		75 - 131	06/01/18 17:41	06/07/18 13:52	1
Dibromofluoromethane	80		75 - 126	06/01/18 17:41	06/07/18 13:52	1
Toluene-d8 (Surr)	99		75 - 124	06/01/18 17:41	06/07/18 13:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B81

Lab Sample ID: 500-146311-21

Date Collected: 06/01/18 13:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.33		0.33	0.077	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2,4,6-Trichlorophenol	<0.33		0.33	0.12	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2,4-Dichlorophenol	<0.33		0.33	0.080	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2,4-Dinitrophenol	<0.68		0.68	0.59	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2,6-Dinitrotoluene	<0.17		0.17	0.066	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2-Methylnaphthalene	<0.068		0.068	0.0062	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2-Methylphenol	<0.17		0.17	0.054	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
2-Nitrophenol	<0.33		0.33	0.080	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
3 & 4 Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
4,6-Dinitro-2-methylphenol	<0.68		0.68	0.27	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
4-Chloroaniline	<0.68		0.68	0.16	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
4-Nitrophenol	<0.68		0.68	0.32	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Acenaphthene	<0.033		0.033	0.0061	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Anthracene	<0.033		0.033	0.0056	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Benzo[a]pyrene	<0.033		0.033	0.0065	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Benzo[b]fluoranthene	<0.033		0.033	0.0073	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Benzo[k]fluoranthene	<0.033		0.033	0.0099	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.062	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Butyl benzyl phthalate	<0.17		0.17	0.064	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Carbazole	<0.17		0.17	0.084	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Chrysene	<0.033		0.033	0.0092	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0065	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Diethyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Di-n-octyl phthalate	<0.17		0.17	0.055	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Fluorene	<0.033		0.033	0.0047	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Hexachlorobenzene	<0.068		0.068	0.0078	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Hexachlorocyclopentadiene	<0.68		0.68	0.19	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B81

Lab Sample ID: 500-146311-21

Date Collected: 06/01/18 13:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0087	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Naphthalene	<0.033		0.033	0.0052	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Nitrobenzene	<0.033		0.033	0.0084	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
N-Nitrosodi-n-propylamine	<0.068		0.068	0.041	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Pentachlorophenol	<0.68		0.68	0.54	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Phenanthrene	<0.033		0.033	0.0047	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Phenol	<0.17		0.17	0.075	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Pyrene	<0.033		0.033	0.0067	mg/Kg	☼	06/12/18 17:10	06/13/18 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		25 - 139				06/12/18 17:10	06/13/18 16:31	1
2-Fluorobiphenyl	79		44 - 121				06/12/18 17:10	06/13/18 16:31	1
2-Fluorophenol	104		46 - 133				06/12/18 17:10	06/13/18 16:31	1
Nitrobenzene-d5	79		41 - 120				06/12/18 17:10	06/13/18 16:31	1
Phenol-d5	98		46 - 125				06/12/18 17:10	06/13/18 16:31	1
Terphenyl-d14	87		35 - 160				06/12/18 17:10	06/13/18 16:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.22	J	1.0	0.20	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Arsenic	0.80		0.52	0.18	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Barium	6.9		0.52	0.059	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Beryllium	0.12	J	0.21	0.048	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Boron	6.3		2.6	0.24	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Cadmium	0.11	B	0.10	0.019	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Calcium	230000	B	100	18	mg/Kg	☼	06/05/18 08:00	06/06/18 22:13	10
Chromium	1.5		0.52	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Cobalt	0.61		0.26	0.068	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Copper	2.5		0.52	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Iron	3000		10	5.4	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Lead	1.9		0.26	0.12	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Magnesium	140000		52	26	mg/Kg	☼	06/05/18 08:00	06/06/18 22:13	10
Manganese	270		0.52	0.075	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Nickel	1.6		0.52	0.15	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Potassium	640		26	9.2	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Selenium	<0.52		0.52	0.30	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Sodium	270		52	7.7	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Vanadium	3.0		0.26	0.061	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1
Zinc	7.1		1.0	0.45	mg/Kg	☼	06/05/18 08:00	06/06/18 04:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/06/18 15:19	06/07/18 16:18	1
Barium	<0.50		0.50	0.050	mg/L		06/06/18 15:19	06/07/18 16:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/06/18 15:19	06/07/18 16:18	1
Boron	<0.10		0.10	0.050	mg/L		06/06/18 15:19	06/07/18 16:18	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Client Sample ID: 1628V2-1-B81

Lab Sample ID: 500-146311-21

Date Collected: 06/01/18 13:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/06/18 15:19	06/07/18 16:18	1
Calcium	6.5		2.5	0.50	mg/L		06/06/18 15:19	06/07/18 16:18	1
Chromium	<0.025		0.025	0.010	mg/L		06/06/18 15:19	06/07/18 16:18	1
Cobalt	<0.025		0.025	0.010	mg/L		06/06/18 15:19	06/07/18 16:18	1
Iron	<0.40		0.40	0.20	mg/L		06/06/18 15:19	06/07/18 16:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/06/18 15:19	06/07/18 16:18	1
Manganese	<0.025		0.025	0.010	mg/L		06/06/18 15:19	06/07/18 16:18	1
Nickel	<0.025		0.025	0.010	mg/L		06/06/18 15:19	06/07/18 16:18	1
Potassium	<2.5		2.5	0.50	mg/L		06/06/18 15:19	06/07/18 16:18	1
Selenium	<0.050		0.050	0.020	mg/L		06/06/18 15:19	06/07/18 16:18	1
Silver	<0.025		0.025	0.010	mg/L		06/06/18 15:19	06/07/18 16:18	1
Zinc	0.11	J B	0.50	0.020	mg/L		06/06/18 15:19	06/07/18 16:18	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/06/18 15:19	06/07/18 20:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/06/18 15:19	06/07/18 20:10	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 08:25	06/07/18 14:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0055	mg/Kg	☼	06/05/18 15:30	06/06/18 17:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.15	mg/Kg	☼	06/13/18 10:30	06/13/18 17:29	1
pH	8.8		0.20	0.20	SU			06/08/18 15:50	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
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.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits

Metals

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

General Chemistry

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146311-1

Laboratory: TestAmerica Chicago


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

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

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

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

CHAIN OF CUSTODY RECORD

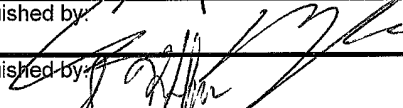
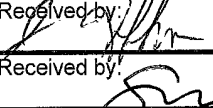
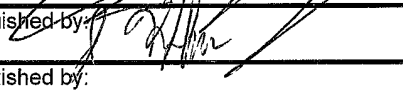
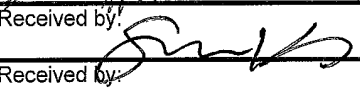
Client Contact Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	 500-146311 COC	Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>I-80 WILL COUNTY</u> Project No.: <u>PTB 184-006/ACT-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other Other: <u>FBI</u> Sampler: <u>CSP/cum</u>	COC No.: <u>1</u> of <u>2</u> Lab Job No.: <u>500-146311</u> Sample Temp: <u>(2.4)(2.2)</u> <u>(4.8)(3.6)(3.2)(5.1)</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

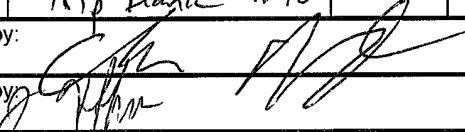
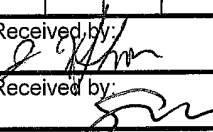
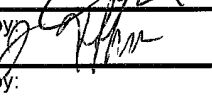
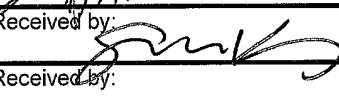
					ANALYSES															
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				
1	1628V2-1-B35	1011	945	G	X	X					X	X	X	X	X					
2	1628V2-1-B34		955																	
3	1628V2-1-B33		1005																	
4	1628V2-1-B32		1020																	
5	1628V2-1-B31		1030																	
6	1628V2-1-B30-1		1040																	
7	1628V2-1-B30-1-NP		1045																	
8	1628V2-1-B30-2		1050																	
9	1628V2-1-B30-3		1055																	
10	1628V2-1-B41		1130																	
11	1628V2-1-B45		1100																	
12	Trip Blank #9			S	X															

Matrix Key:
 W: Water
 S: Soil
 SL: Sludge
 S: Sediment
 L: Leachate
 DW: Drinking Water
 OL: Oil
 O: Other

																				Comments			
																							0-8 TB9
																							0-8 TB9
																							0-8 TB9
																							0-8 TB9
																							0-8 TB9
																							0-7 TB9
																							0-7 TB9
																							7-14 TB9
																							14-22 TB9
																							0-2 TB10
																							0-4 TB10

Relinquished by: 	Date/Time: <u>6/1/18 1400</u>	Received by: 	Date/Time: <u>6-1-18 1425</u>
Relinquished by: 	Date/Time: <u>6-1-18 1455</u>	Received by: 	Date/Time: <u>06/01/18 1455</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

CHAIN OF CUSTODY RECORD

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com					Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com					Project Name: <u>I-80 WILL COUNTY</u> Project No.: <u>PTB 184-006/AE-706A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>FBI</u> Sampler: <u>CSPICEM</u>					COC No.: <u>2</u> of <u>2</u> Lab Job No.: <u>500-146311</u> Sample Temp:				
Special Instructions: See Table 2 for complete parameter lists and minimum reporting limits. * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal. ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter. *** If total cyanide exceeds Class I Standard <u>Class I Standard</u> , run ASTM D3987 (Neutral Leach) cyanide.					ANALYSES										Matrix Key: W: Water S: Soil SL: Sludge L: Sediment S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other				
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments		
13	1628V2-1-B46	6/11	1150	S	X	X					X	X	X	X	X		0-4 TB10		
14	1628V2-1-B 47		1250														0-3.5 TB10		
15	1628V2-1-B 48		1210														0-2 TB10		
16	1628V2-1-B 49		1230														0-2 TB10		
17	1628V2-1-B 49-DOP		1235														0-2 TB10		
18	1628V2-1-B 50		1259														0-4 TB11		
19	1628V2-1-B 51		1305														0-6.5 TB11		
20	1628V2-1-B 52		1320														0-5 TB11		
21	1628V2-1-B 51		1325														0-5 TB11		
22	1628V2-1-B 52		1335														0-3 TB11		
23	Top Blank #10			S	X														
Relinquished by: 					Date/Time: <u>6/11/18 1410</u>					Received by: 					Date/Time: <u>6-1-18 1405</u>				
Relinquished by: 					Date/Time: <u>6-1-18 1455</u>					Received by: 					Date/Time: <u>06/01/18 1455</u>				
Relinquished by:					Date/Time:					Received by:					Date/Time:				

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: 500-146439-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/15/2018 8:35:02 AM

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

LINKS

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www.testamericainc.com

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

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

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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B60

Lab Sample ID: 500-146439-1

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Acetone	0.030		0.019	0.0081	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	06/05/18 15:57	06/11/18 15:54	1
4-Bromofluorobenzene (Surr)	104		75 - 131	06/05/18 15:57	06/11/18 15:54	1
Dibromofluoromethane	81		75 - 126	06/05/18 15:57	06/11/18 15:54	1
Toluene-d8 (Surr)	100		75 - 124	06/05/18 15:57	06/11/18 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B60

Lab Sample ID: 500-146439-1

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2,4-Dinitrophenol	<0.71	F1	0.71	0.62	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
3,3'-Dichlorobenzidine	<0.18	F1	0.18	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
4,6-Dinitro-2-methylphenol	<0.71	F1	0.71	0.28	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
4-Chloroaniline	<0.71	F1	0.71	0.17	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Acenaphthene	0.0077	J	0.035	0.0064	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Acenaphthylene	0.023	J	0.035	0.0047	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Anthracene	0.13		0.035	0.0059	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Benzo[a]anthracene	0.21		0.035	0.0048	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Benzo[a]pyrene	0.24		0.035	0.0068	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Benzo[b]fluoranthene	0.47		0.035	0.0076	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Benzo[g,h,i]perylene	0.14	F1	0.035	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Benzo[k]fluoranthene	0.21		0.035	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Bis(2-ethylhexyl) phthalate	<0.18	* F1	0.18	0.065	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Butyl benzyl phthalate	<0.18	F1	0.18	0.067	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Chrysene	0.39		0.035	0.0097	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Dibenz(a,h)anthracene	0.038	F1	0.035	0.0068	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Di-n-octyl phthalate	<0.18	F1	0.18	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Fluoranthene	0.44	F1	0.035	0.0066	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Fluorene	0.0080	J	0.035	0.0050	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Hexachlorocyclopentadiene	<0.71	F1	0.71	0.20	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Hexachloroethane	<0.18	F1	0.18	0.054	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B60

Lab Sample ID: 500-146439-1

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.13	F1	0.035	0.0092	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Phenanthrene	0.14		0.035	0.0049	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Pyrene	0.58	F1	0.035	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 18:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	98		25 - 139				06/08/18 07:37	06/11/18 18:11	1
2-Fluorobiphenyl	86		44 - 121				06/08/18 07:37	06/11/18 18:11	1
2-Fluorophenol	111		46 - 133				06/08/18 07:37	06/11/18 18:11	1
Nitrobenzene-d5	84		41 - 120				06/08/18 07:37	06/11/18 18:11	1
Phenol-d5	105		46 - 125				06/08/18 07:37	06/11/18 18:11	1
Terphenyl-d14	152		35 - 160				06/08/18 07:37	06/11/18 18:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J F1	0.98	0.19	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Arsenic	2.8		0.49	0.17	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Barium	14		0.49	0.056	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Beryllium	0.21		0.20	0.046	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Boron	8.4		2.5	0.23	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Cadmium	0.11	B	0.098	0.018	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Calcium	180000	B	98	17	mg/Kg	☼	06/06/18 16:35	06/09/18 01:17	10
Chromium	10		0.49	0.24	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Cobalt	2.0		0.25	0.064	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Copper	6.1		0.49	0.14	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Iron	6200	B	9.8	5.1	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Lead	11	F1	0.25	0.11	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Magnesium	110000	B	49	24	mg/Kg	☼	06/06/18 16:35	06/09/18 01:17	10
Manganese	260		0.49	0.071	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Nickel	5.3		0.49	0.14	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Potassium	770	F1	25	8.7	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Selenium	<0.49		0.49	0.29	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Silver	<0.25		0.25	0.063	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Sodium	440		49	7.3	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Thallium	<0.49	F1	0.49	0.24	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Vanadium	6.3		0.25	0.058	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1
Zinc	42		0.98	0.43	mg/Kg	☼	06/06/18 16:35	06/08/18 02:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:19	06/12/18 02:36	1
Barium	<0.50		0.50	0.050	mg/L		06/08/18 15:19	06/12/18 02:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 02:36	1
Boron	<0.10		0.10	0.050	mg/L		06/08/18 15:19	06/12/18 02:36	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B60

Lab Sample ID: 500-146439-1

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050	^	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 02:36	1
Calcium	6.7		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 02:36	1
Chromium	0.011	J	0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:36	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:36	1
Iron	4.4		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 02:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 02:36	1
Manganese	0.030		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:36	1
Nickel	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:36	1
Potassium	3.0		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 02:36	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 02:36	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:36	1
Zinc	0.020	J B	0.50	0.020	mg/L		06/08/18 15:19	06/12/18 02:36	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 14:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 14:08	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0085	J	0.016	0.0054	mg/Kg	☼	06/06/18 16:10	06/11/18 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.20	J	0.49	0.17	mg/Kg	☼	06/13/18 13:10	06/13/18 16:14	1
pH	8.8		0.20	0.20	SU			06/11/18 11:27	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B61

Lab Sample ID: 500-146439-2

Date Collected: 06/04/18 13:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Acetone	0.024		0.018	0.0078	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	06/05/18 15:57	06/11/18 16:20	1
4-Bromofluorobenzene (Surr)	110		75 - 131	06/05/18 15:57	06/11/18 16:20	1
Dibromofluoromethane	84		75 - 126	06/05/18 15:57	06/11/18 16:20	1
Toluene-d8 (Surr)	99		75 - 124	06/05/18 15:57	06/11/18 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B61

Lab Sample ID: 500-146439-2

Date Collected: 06/04/18 13:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Bis(2-ethylhexyl) phthalate	<0.20	*	0.20	0.071	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B61

Lab Sample ID: 500-146439-2

Date Collected: 06/04/18 13:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	06/08/18 07:37	06/11/18 12:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		25 - 139				06/08/18 07:37	06/11/18 12:35	1
2-Fluorobiphenyl	85		44 - 121				06/08/18 07:37	06/11/18 12:35	1
2-Fluorophenol	114		46 - 133				06/08/18 07:37	06/11/18 12:35	1
Nitrobenzene-d5	87		41 - 120				06/08/18 07:37	06/11/18 12:35	1
Phenol-d5	108		46 - 125				06/08/18 07:37	06/11/18 12:35	1
Terphenyl-d14	96		35 - 160				06/08/18 07:37	06/11/18 12:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Arsenic	6.6		0.58	0.20	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Barium	60		0.58	0.066	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Beryllium	0.53		0.23	0.054	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Boron	1.9 J		2.9	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Cadmium	0.18 B		0.12	0.021	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Calcium	1100 B		12	2.0	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Chromium	13		0.58	0.29	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Cobalt	8.7		0.29	0.076	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Copper	11		0.58	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Iron	16000 B		12	6.0	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Lead	13		0.29	0.13	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Magnesium	2100 B		5.8	2.9	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Manganese	440		0.58	0.084	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Nickel	17		0.58	0.17	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Potassium	1100		29	10	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Selenium	1.1		0.58	0.34	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Silver	0.23 J		0.29	0.075	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Sodium	1700		58	8.6	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Vanadium	24		0.29	0.068	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1
Zinc	56		1.2	0.51	mg/Kg	☼	06/06/18 16:35	06/08/18 03:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 01:38	1
Iron	0.52		0.40	0.20	mg/L		06/08/18 15:23	06/12/18 01:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:23	06/12/18 01:38	1
Manganese	0.049		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 01:38	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B61

Lab Sample ID: 500-146439-2

Date Collected: 06/04/18 13:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.017	J	0.050	0.010	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Barium	0.53		0.50	0.050	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Boron	0.092	J	0.10	0.050	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Cadmium	0.0033	J ^	0.0050	0.0020	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Calcium	9.2		2.5	0.50	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Chromium	0.12		0.025	0.010	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Cobalt	0.021	J	0.025	0.010	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Iron	120		0.40	0.20	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Lead	0.023		0.0075	0.0075	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Manganese	1.1		0.025	0.010	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Nickel	0.084		0.025	0.010	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Potassium	18		2.5	0.50	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Selenium	<0.050		0.050	0.020	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Silver	<0.025		0.025	0.010	mg/L	-	06/08/18 15:19	06/12/18 02:40	1
Zinc	0.50	B	0.50	0.020	mg/L	-	06/08/18 15:19	06/12/18 02:40	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	06/08/18 15:19	06/09/18 14:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	06/08/18 15:19	06/09/18 14:13	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020	0.00020	mg/L	-	06/11/18 13:25	06/12/18 09:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.019	0.0063	mg/Kg	☼	06/06/18 16:10	06/11/18 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.17	mg/Kg	☼	06/13/18 13:10	06/13/18 16:15	1
pH	7.9		0.20	0.20	SU			06/11/18 11:30	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B78

Lab Sample ID: 500-146439-3

Date Collected: 06/04/18 13:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Acetone	0.011	J	0.016	0.0069	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	06/05/18 15:57	06/11/18 16:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	06/05/18 15:57	06/11/18 16:47	1
4-Bromofluorobenzene (Surr)	106		75 - 131	06/05/18 15:57	06/11/18 16:47	1
Dibromofluoromethane	83		75 - 126	06/05/18 15:57	06/11/18 16:47	1
Toluene-d8 (Surr)	99		75 - 124	06/05/18 15:57	06/11/18 16:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B78

Lab Sample ID: 500-146439-3

Date Collected: 06/04/18 13:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Bis(2-ethylhexyl) phthalate	<0.19	*	0.19	0.069	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B78

Lab Sample ID: 500-146439-3

Date Collected: 06/04/18 13:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/08/18 07:37	06/11/18 13:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		25 - 139				06/08/18 07:37	06/11/18 13:01	1
2-Fluorobiphenyl	84		44 - 121				06/08/18 07:37	06/11/18 13:01	1
2-Fluorophenol	111		46 - 133				06/08/18 07:37	06/11/18 13:01	1
Nitrobenzene-d5	86		41 - 120				06/08/18 07:37	06/11/18 13:01	1
Phenol-d5	105		46 - 125				06/08/18 07:37	06/11/18 13:01	1
Terphenyl-d14	96		35 - 160				06/08/18 07:37	06/11/18 13:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Arsenic	9.5		0.54	0.19	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Barium	68		0.54	0.062	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Beryllium	0.58		0.22	0.051	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Boron	3.1		2.7	0.25	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Cadmium	0.15 B		0.11	0.019	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Calcium	9900 B		11	1.8	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Chromium	14		0.54	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Cobalt	9.9		0.27	0.071	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Copper	18		0.54	0.15	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Iron	19000 B		11	5.6	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Lead	15		0.27	0.13	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Magnesium	7600 B		5.4	2.7	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Manganese	460		0.54	0.079	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Nickel	19		0.54	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Potassium	1200		27	9.6	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Selenium	1.1		0.54	0.32	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Silver	0.23 J		0.27	0.070	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Sodium	720		54	8.0	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Vanadium	25		0.27	0.064	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1
Zinc	47		1.1	0.48	mg/Kg	☼	06/06/18 16:35	06/08/18 03:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:23	06/12/18 01:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:23	06/12/18 01:43	1
Chromium	<0.025		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 01:43	1
Iron	<0.40		0.40	0.20	mg/L		06/08/18 15:23	06/12/18 01:43	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B78

Lab Sample ID: 500-146439-3

Date Collected: 06/04/18 13:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:23	06/12/18 01:43	1
Manganese	0.53		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 01:43	1
Nickel	<0.025		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 01:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.051		0.050	0.010	mg/L		06/08/18 15:19	06/12/18 02:44	1
Barium	0.51		0.50	0.050	mg/L		06/08/18 15:19	06/12/18 02:44	1
Beryllium	0.0046		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 02:44	1
Boron	0.081	J	0.10	0.050	mg/L		06/08/18 15:19	06/12/18 02:44	1
Cadmium	0.0026	J ^	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 02:44	1
Calcium	14		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 02:44	1
Chromium	0.14		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:44	1
Cobalt	0.036		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:44	1
Iron	160		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 02:44	1
Lead	0.069		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 02:44	1
Manganese	1.7		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:44	1
Nickel	0.12		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:44	1
Potassium	14		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 02:44	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 02:44	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:44	1
Zinc	0.44	J B	0.50	0.020	mg/L		06/08/18 15:19	06/12/18 02:44	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 14:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 14:17	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00032		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 09:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.019	0.0064	mg/Kg	☼	06/06/18 16:10	06/11/18 16:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/13/18 13:10	06/13/18 16:15	1
pH	8.0		0.20	0.20	SU			06/11/18 11:34	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B80

Lab Sample ID: 500-146439-4

Date Collected: 06/04/18 08:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Acetone	0.026		0.017	0.0075	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/05/18 15:57	06/11/18 17:39	1
4-Bromofluorobenzene (Surr)	107		75 - 131	06/05/18 15:57	06/11/18 17:39	1
Dibromofluoromethane	82		75 - 126	06/05/18 15:57	06/11/18 17:39	1
Toluene-d8 (Surr)	100		75 - 124	06/05/18 15:57	06/11/18 17:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B80

Lab Sample ID: 500-146439-4

Date Collected: 06/04/18 08:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Benzo[a]anthracene	0.019	J	0.037	0.0051	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Benzo[a]pyrene	0.027	J	0.037	0.0073	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Benzo[b]fluoranthene	0.036	J	0.037	0.0081	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Benzo[g,h,i]perylene	0.013	J	0.037	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Bis(2-ethylhexyl) phthalate	<0.19	*	0.19	0.069	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Chrysene	0.020	J	0.037	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Dibenz(a,h)anthracene	0.0098	J	0.037	0.0073	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Fluoranthene	0.030	J	0.037	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B80

Lab Sample ID: 500-146439-4

Date Collected: 06/04/18 08:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.022	J	0.037	0.0098	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Phenanthrene	0.011	J	0.037	0.0052	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Pyrene	0.026	J	0.037	0.0075	mg/Kg	☼	06/08/18 07:37	06/11/18 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		25 - 139				06/08/18 07:37	06/11/18 13:26	1
2-Fluorobiphenyl	89		44 - 121				06/08/18 07:37	06/11/18 13:26	1
2-Fluorophenol	115		46 - 133				06/08/18 07:37	06/11/18 13:26	1
Nitrobenzene-d5	86		41 - 120				06/08/18 07:37	06/11/18 13:26	1
Phenol-d5	108		46 - 125				06/08/18 07:37	06/11/18 13:26	1
Terphenyl-d14	96		35 - 160				06/08/18 07:37	06/11/18 13:26	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	☼	06/06/18 16:35	06/08/18 03:28	1
Arsenic	12		0.57	0.19	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Barium	55		0.57	0.065	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Beryllium	0.78		0.23	0.053	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Boron	3.0		2.8	0.26	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Cadmium	0.21	B	0.11	0.020	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Calcium	4300	B	11	1.9	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Chromium	16		0.57	0.28	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Cobalt	12		0.28	0.074	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Copper	26		0.57	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Iron	25000	B	11	5.9	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Lead	20		0.28	0.13	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Magnesium	4200	B	5.7	2.8	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Manganese	620		0.57	0.082	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Nickel	26		0.57	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Potassium	1300		28	10	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Selenium	1.8		0.57	0.33	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Silver	0.27	J	0.28	0.073	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Sodium	340		57	8.4	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Vanadium	27		0.28	0.067	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1
Zinc	64		1.1	0.50	mg/Kg	☼	06/06/18 16:35	06/08/18 03:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/08/18 15:23	06/12/18 01:47	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B80

Lab Sample ID: 500-146439-4

Date Collected: 06/04/18 08:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:19	06/12/18 02:48	1
Barium	0.066	J	0.50	0.050	mg/L		06/08/18 15:19	06/12/18 02:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 02:48	1
Boron	<0.10		0.10	0.050	mg/L		06/08/18 15:19	06/12/18 02:48	1
Cadmium	<0.0050	^	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 02:48	1
Calcium	9.6		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 02:48	1
Chromium	0.019	J	0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:48	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:48	1
Iron	18		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 02:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 02:48	1
Manganese	0.14		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:48	1
Nickel	0.013	J	0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:48	1
Potassium	3.7		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 02:48	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 02:48	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 02:48	1
Zinc	0.067	J B	0.50	0.020	mg/L		06/08/18 15:19	06/12/18 02:48	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 14:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 14:21	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 09:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.018	0.0061	mg/Kg	☼	06/06/18 16:10	06/11/18 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/13/18 13:10	06/13/18 16:15	1
pH	7.8		0.20	0.20	SU			06/11/18 11:37	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B43-1

Lab Sample ID: 500-146439-7

Date Collected: 06/04/18 09:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Acetone	0.017		0.016	0.0070	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 134	06/05/18 15:57	06/11/18 18:57	1
4-Bromofluorobenzene (Surr)	108		75 - 131	06/05/18 15:57	06/11/18 18:57	1
Dibromofluoromethane	81		75 - 126	06/05/18 15:57	06/11/18 18:57	1
Toluene-d8 (Surr)	98		75 - 124	06/05/18 15:57	06/11/18 18:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B43-1

Lab Sample ID: 500-146439-7

Date Collected: 06/04/18 09:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.30	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Benzo[a]anthracene	0.0076	J	0.038	0.0051	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Benzo[a]pyrene	0.016	J	0.038	0.0073	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Benzo[b]fluoranthene	0.020	J	0.038	0.0082	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Bis(2-ethylhexyl) phthalate	<0.19	*	0.19	0.069	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Chrysene	0.010	J	0.038	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Dibenz(a,h)anthracene	0.0076	J	0.038	0.0073	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Fluoranthene	0.014	J	0.038	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B43-1

Lab Sample ID: 500-146439-7

Date Collected: 06/04/18 09:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.012	J	0.038	0.0098	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Phenanthrene	0.0096	J	0.038	0.0053	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Pyrene	0.012	J	0.038	0.0075	mg/Kg	☼	06/08/18 07:37	06/11/18 16:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		25 - 139				06/08/18 07:37	06/11/18 16:54	1
2-Fluorobiphenyl	89		44 - 121				06/08/18 07:37	06/11/18 16:54	1
2-Fluorophenol	118		46 - 133				06/08/18 07:37	06/11/18 16:54	1
Nitrobenzene-d5	92		41 - 120				06/08/18 07:37	06/11/18 16:54	1
Phenol-d5	112		46 - 125				06/08/18 07:37	06/11/18 16:54	1
Terphenyl-d14	102		35 - 160				06/08/18 07:37	06/11/18 16:54	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	☼	06/06/18 16:35	06/08/18 03:48	1
Arsenic	9.2		0.56	0.19	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Barium	55		0.56	0.064	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Beryllium	0.57		0.22	0.052	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Boron	3.6		2.8	0.26	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Cadmium	0.27	B	0.11	0.020	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Calcium	25000	B	11	1.9	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Chromium	11		0.56	0.28	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Cobalt	8.6		0.28	0.074	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Copper	18		0.56	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Iron	19000	B	11	5.8	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Lead	26		0.28	0.13	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Magnesium	16000	B	5.6	2.8	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Manganese	480		0.56	0.081	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Nickel	19		0.56	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Potassium	1100		28	9.9	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Selenium	0.99		0.56	0.33	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Silver	0.24	J	0.28	0.072	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Sodium	68		56	8.3	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Vanadium	19		0.28	0.066	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1
Zinc	59		1.1	0.49	mg/Kg	☼	06/06/18 16:35	06/08/18 03:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/08/18 15:23	06/12/18 01:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:23	06/12/18 01:59	1
Manganese	0.65		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 01:59	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B43-1

Lab Sample ID: 500-146439-7

Date Collected: 06/04/18 09:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:19	06/12/18 03:00	1
Barium	0.13	J	0.50	0.050	mg/L		06/08/18 15:19	06/12/18 03:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 03:00	1
Boron	0.060	J	0.10	0.050	mg/L		06/08/18 15:19	06/12/18 03:00	1
Cadmium	<0.0050	[^]	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 03:00	1
Calcium	16		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:00	1
Chromium	0.033		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:00	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:00	1
Iron	38		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 03:00	1
Lead	0.023		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 03:00	1
Manganese	0.20		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:00	1
Nickel	0.027		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:00	1
Potassium	5.6		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:00	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 03:00	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:00	1
Zinc	0.094	J B	0.50	0.020	mg/L		06/08/18 15:19	06/12/18 03:00	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 14:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 14:33	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 09:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.017	0.0055	mg/Kg	☼	06/06/18 16:10	06/11/18 16:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.42		0.42	0.14	mg/Kg	☼	06/13/18 13:10	06/13/18 16:17	1
pH	8.0		0.20	0.20	SU			06/11/18 11:47	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B65-2

Lab Sample ID: 500-146439-11

Date Collected: 06/04/18 12:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Acetone	0.026		0.017	0.0074	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 20:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 134	06/05/18 15:57	06/11/18 20:41	1
4-Bromofluorobenzene (Surr)	105		75 - 131	06/05/18 15:57	06/11/18 20:41	1
Dibromofluoromethane	83		75 - 126	06/05/18 15:57	06/11/18 20:41	1
Toluene-d8 (Surr)	99		75 - 124	06/05/18 15:57	06/11/18 20:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B65-2

Lab Sample ID: 500-146439-11

Date Collected: 06/04/18 12:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Bis(2-ethylhexyl) phthalate	<0.18	*	0.18	0.067	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B65-2

Lab Sample ID: 500-146439-11

Date Collected: 06/04/18 12:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	☼	06/08/18 07:37	06/11/18 15:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	92		25 - 139				06/08/18 07:37	06/11/18 15:10	1
2-Fluorobiphenyl	86		44 - 121				06/08/18 07:37	06/11/18 15:10	1
2-Fluorophenol	111		46 - 133				06/08/18 07:37	06/11/18 15:10	1
Nitrobenzene-d5	85		41 - 120				06/08/18 07:37	06/11/18 15:10	1
Phenol-d5	106		46 - 125				06/08/18 07:37	06/11/18 15:10	1
Terphenyl-d14	97		35 - 160				06/08/18 07:37	06/11/18 15:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J	1.1	0.21	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Arsenic	9.8		0.54	0.18	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Barium	40		0.54	0.061	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Beryllium	0.49		0.21	0.050	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Boron	5.2		2.7	0.25	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Cadmium	0.27	B	0.11	0.019	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Calcium	100000	B	110	18	mg/Kg	☼	06/06/18 16:35	06/09/18 02:01	10
Chromium	9.0		0.54	0.26	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Cobalt	7.4		0.27	0.070	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Copper	17		0.54	0.15	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Iron	19000	B	11	5.6	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Lead	14		0.27	0.12	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Magnesium	47000	B	5.4	2.7	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Manganese	590		0.54	0.078	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Nickel	19		0.54	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Potassium	1200		27	9.5	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Selenium	0.89		0.54	0.31	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Silver	0.17	J	0.27	0.069	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Sodium	180		54	7.9	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Vanadium	15		0.27	0.063	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1
Zinc	51		1.1	0.47	mg/Kg	☼	06/06/18 16:35	06/08/18 04:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:19	06/12/18 03:24	1
Barium	<0.50		0.50	0.050	mg/L		06/08/18 15:19	06/12/18 03:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 03:24	1
Boron	<0.10		0.10	0.050	mg/L		06/08/18 15:19	06/12/18 03:24	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B65-2

Lab Sample ID: 500-146439-11

Date Collected: 06/04/18 12:45

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050	^	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 03:24	1
Calcium	11		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:24	1
Chromium	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:24	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:24	1
Iron	3.9		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 03:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 03:24	1
Manganese	0.041		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:24	1
Nickel	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:24	1
Potassium	1.5 J		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:24	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 03:24	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:24	1
Zinc	0.048 J B		0.50	0.020	mg/L		06/08/18 15:19	06/12/18 03:24	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 14:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 14:57	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.017	0.0057	mg/Kg	☼	06/06/18 16:10	06/11/18 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	06/14/18 10:15	06/14/18 15:49	1
pH	8.1		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B39-1

Lab Sample ID: 500-146439-15

Date Collected: 06/04/18 10:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00088	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00072	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
2-Butanone (MEK)	<0.0051	*	0.0051	0.0023	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
2-Hexanone	<0.0051	*	0.0051	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
4-Methyl-2-pentanone (MIBK)	<0.0051	*	0.0051	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Acetone	<0.021	*	0.021	0.0090	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Chloroform	<0.0021		0.0021	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Dibromochloromethane	<0.0021		0.0021	0.00067	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00091	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00072	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Vinyl chloride	<0.0021		0.0021	0.00091	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	06/05/18 15:57	06/11/18 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		70 - 134	06/05/18 15:57	06/11/18 17:55	1
4-Bromofluorobenzene (Surr)	102		75 - 131	06/05/18 15:57	06/11/18 17:55	1
Dibromofluoromethane	111		75 - 126	06/05/18 15:57	06/11/18 17:55	1
Toluene-d8 (Surr)	89		75 - 124	06/05/18 15:57	06/11/18 17:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B39-1

Lab Sample ID: 500-146439-15

Date Collected: 06/04/18 10:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Benzo[a]anthracene	0.022	J	0.036	0.0048	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Benzo[a]pyrene	0.031	J	0.036	0.0069	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Benzo[b]fluoranthene	0.046		0.036	0.0077	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Benzo[g,h,i]perylene	0.016	J	0.036	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Benzo[k]fluoranthene	0.016	J	0.036	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Bis(2-ethylhexyl) phthalate	<0.18	*	0.18	0.065	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Chrysene	0.031	J	0.036	0.0098	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Dibenz(a,h)anthracene	0.0091	J	0.036	0.0069	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Fluoranthene	0.046		0.036	0.0066	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B39-1

Lab Sample ID: 500-146439-15

Date Collected: 06/04/18 10:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.021	J	0.036	0.0093	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Phenanthrene	0.021	J	0.036	0.0050	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Pyrene	0.040		0.036	0.0071	mg/Kg	☼	06/08/18 07:37	06/11/18 17:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		25 - 139				06/08/18 07:37	06/11/18 17:20	1
2-Fluorobiphenyl	84		44 - 121				06/08/18 07:37	06/11/18 17:20	1
2-Fluorophenol	109		46 - 133				06/08/18 07:37	06/11/18 17:20	1
Nitrobenzene-d5	84		41 - 120				06/08/18 07:37	06/11/18 17:20	1
Phenol-d5	105		46 - 125				06/08/18 07:37	06/11/18 17:20	1
Terphenyl-d14	97		35 - 160				06/08/18 07:37	06/11/18 17:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Arsenic	8.6		0.55	0.19	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Barium	79		0.55	0.063	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Beryllium	0.63		0.22	0.052	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Boron	3.2		2.8	0.26	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Cadmium	0.33	B	0.11	0.020	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Calcium	13000	B	11	1.9	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Chromium	13		0.55	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Cobalt	9.4		0.28	0.072	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Copper	17		0.55	0.15	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Iron	18000	B	11	5.7	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Lead	37		0.28	0.13	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Magnesium	8300	B	5.5	2.7	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Manganese	540		0.55	0.080	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Nickel	20		0.55	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Potassium	1200		28	9.8	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Selenium	1.3		0.55	0.32	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Silver	0.24	J	0.28	0.071	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Sodium	82		55	8.2	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Vanadium	22		0.28	0.065	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1
Zinc	72		1.1	0.48	mg/Kg	☼	06/06/18 16:35	06/08/18 04:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/08/18 15:23	06/12/18 02:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:23	06/12/18 02:36	1
Manganese	0.42		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 02:36	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B39-1

Lab Sample ID: 500-146439-15

Date Collected: 06/04/18 10:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:19	06/12/18 03:36	1
Barium	0.17	J	0.50	0.050	mg/L		06/08/18 15:19	06/12/18 03:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 03:36	1
Boron	0.059	J	0.10	0.050	mg/L		06/08/18 15:19	06/12/18 03:36	1
Cadmium	<0.0050	^	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 03:36	1
Calcium	13		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:36	1
Chromium	0.033		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:36	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:36	1
Iron	31		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 03:36	1
Lead	0.017		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 03:36	1
Manganese	0.30		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:36	1
Nickel	0.024	J	0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:36	1
Potassium	6.3		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:36	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 03:36	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:36	1
Zinc	0.24	J B	0.50	0.020	mg/L		06/08/18 15:19	06/12/18 03:36	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 15:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 15:09	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.016	0.0055	mg/Kg	☼	06/06/18 16:10	06/11/18 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.15	mg/Kg	☼	06/14/18 10:15	06/14/18 15:50	1
pH	7.8		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B36-1

Lab Sample ID: 500-146439-19

Date Collected: 06/04/18 11:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
2-Butanone (MEK)	<0.0051	*	0.0051	0.0022	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
2-Hexanone	<0.0051	*	0.0051	0.0016	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
4-Methyl-2-pentanone (MIBK)	<0.0051	*	0.0051	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Acetone	0.015	J*	0.020	0.0088	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Chloromethane	<0.0051		0.0051	0.0020	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Ethylbenzene	<0.0020		0.0020	0.00097	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	06/05/18 15:57	06/11/18 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125		70 - 134	06/05/18 15:57	06/11/18 19:41	1
4-Bromofluorobenzene (Surr)	106		75 - 131	06/05/18 15:57	06/11/18 19:41	1
Dibromofluoromethane	115		75 - 126	06/05/18 15:57	06/11/18 19:41	1
Toluene-d8 (Surr)	109		75 - 124	06/05/18 15:57	06/11/18 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B36-1

Lab Sample ID: 500-146439-19

Date Collected: 06/04/18 11:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Benzo[a]anthracene	0.0061	J	0.041	0.0056	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Benzo[a]pyrene	0.014	J	0.041	0.0081	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Bis(2-ethylhexyl) phthalate	<0.21	*	0.21	0.076	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Fluoranthene	0.012	J	0.041	0.0077	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B36-1

Lab Sample ID: 500-146439-19

Date Collected: 06/04/18 11:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.013	J	0.041	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Phenanthrene	0.0076	J	0.041	0.0058	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Pyrene	0.0095	J	0.041	0.0083	mg/Kg	☼	06/08/18 07:37	06/11/18 11:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		25 - 139				06/08/18 07:37	06/11/18 11:17	1
2-Fluorobiphenyl	79		44 - 121				06/08/18 07:37	06/11/18 11:17	1
2-Fluorophenol	104		46 - 133				06/08/18 07:37	06/11/18 11:17	1
Nitrobenzene-d5	83		41 - 120				06/08/18 07:37	06/11/18 11:17	1
Phenol-d5	104		46 - 125				06/08/18 07:37	06/11/18 11:17	1
Terphenyl-d14	93		35 - 160				06/08/18 07:37	06/11/18 11:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Arsenic	7.5		0.60	0.20	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Barium	120		0.60	0.068	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Beryllium	0.72		0.24	0.056	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Boron	3.6		3.0	0.28	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Cadmium	0.33	B	0.12	0.022	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Calcium	4500	B	12	2.0	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Chromium	15		0.60	0.30	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Cobalt	9.9		0.30	0.078	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Copper	15		0.60	0.17	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Iron	18000	B	12	6.2	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Lead	18		0.30	0.14	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Magnesium	3300	B	6.0	3.0	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Manganese	740		0.60	0.087	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Nickel	20		0.60	0.17	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Potassium	1600		30	11	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Selenium	1.6		0.60	0.35	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Silver	0.30		0.30	0.077	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Sodium	120		60	8.8	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Vanadium	27		0.30	0.071	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1
Zinc	72		1.2	0.52	mg/Kg	☼	06/06/18 16:35	06/08/18 04:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.30		0.20	0.20	mg/L		06/08/18 15:23	06/12/18 02:53	1
Manganese	0.021	J	0.025	0.010	mg/L		06/08/18 15:23	06/12/18 02:53	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B36-1

Lab Sample ID: 500-146439-19

Date Collected: 06/04/18 11:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:19	06/12/18 03:52	1
Barium	0.25	J	0.50	0.050	mg/L		06/08/18 15:19	06/12/18 03:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 03:52	1
Boron	0.061	J	0.10	0.050	mg/L		06/08/18 15:19	06/12/18 03:52	1
Cadmium	0.0024	J ^	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 03:52	1
Calcium	9.3		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:52	1
Chromium	0.041		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:52	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:52	1
Iron	35		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 03:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 03:52	1
Manganese	0.36		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:52	1
Nickel	0.027		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:52	1
Potassium	6.9		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 03:52	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 03:52	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 03:52	1
Zinc	0.15	J B	0.50	0.020	mg/L		06/08/18 15:19	06/12/18 03:52	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 15:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 15:26	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.019	0.0063	mg/Kg	☼	06/06/18 16:10	06/11/18 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/14/18 10:15	06/14/18 15:52	1
pH	7.6		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-1

Lab Sample ID: 500-146439-20

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
2-Butanone (MEK)	<0.0047	*	0.0047	0.0021	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
2-Hexanone	<0.0047	*	0.0047	0.0015	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
4-Methyl-2-pentanone (MIBK)	<0.0047	*	0.0047	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Acetone	<0.019	*	0.019	0.0081	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	06/05/18 15:57	06/11/18 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		70 - 134	06/05/18 15:57	06/11/18 20:07	1
4-Bromofluorobenzene (Surr)	104		75 - 131	06/05/18 15:57	06/11/18 20:07	1
Dibromofluoromethane	114		75 - 126	06/05/18 15:57	06/11/18 20:07	1
Toluene-d8 (Surr)	108		75 - 124	06/05/18 15:57	06/11/18 20:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-1

Lab Sample ID: 500-146439-20

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Bis(2-ethylhexyl) phthalate	<0.19	*	0.19	0.070	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-1

Lab Sample ID: 500-146439-20

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/08/18 07:37	06/11/18 11:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		25 - 139				06/08/18 07:37	06/11/18 11:43	1
2-Fluorobiphenyl	70		44 - 121				06/08/18 07:37	06/11/18 11:43	1
2-Fluorophenol	95		46 - 133				06/08/18 07:37	06/11/18 11:43	1
Nitrobenzene-d5	69		41 - 120				06/08/18 07:37	06/11/18 11:43	1
Phenol-d5	95		46 - 125				06/08/18 07:37	06/11/18 11:43	1
Terphenyl-d14	95		35 - 160				06/08/18 07:37	06/11/18 11:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Arsenic	8.3		0.54	0.18	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Barium	81		0.54	0.062	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Beryllium	0.68		0.22	0.050	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Boron	1.5	J	2.7	0.25	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Cadmium	0.22	B	0.11	0.019	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Calcium	2300	B	11	1.8	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Chromium	14		0.54	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Cobalt	11		0.27	0.071	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Copper	18		0.54	0.15	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Iron	19000	B	11	5.6	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Lead	19		0.27	0.12	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Magnesium	3000	B	5.4	2.7	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Manganese	540		0.54	0.078	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Nickel	21		0.54	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Potassium	1200		27	9.6	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Selenium	1.4		0.54	0.32	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Silver	0.27		0.27	0.070	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Sodium	43	J	54	8.0	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Vanadium	23		0.27	0.064	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1
Zinc	59		1.1	0.47	mg/Kg	☼	06/06/18 16:35	06/08/18 04:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/08/18 15:23	06/12/18 02:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:23	06/12/18 02:57	1
Manganese	0.070		0.025	0.010	mg/L		06/08/18 15:23	06/12/18 02:57	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-1

Lab Sample ID: 500-146439-20

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.019	J	0.050	0.010	mg/L		06/08/18 15:19	06/12/18 04:04	1
Barium	0.39	J	0.50	0.050	mg/L		06/08/18 15:19	06/12/18 04:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:19	06/12/18 04:04	1
Boron	0.092	J	0.10	0.050	mg/L		06/08/18 15:19	06/12/18 04:04	1
Cadmium	0.0023	J ^	0.0050	0.0020	mg/L		06/08/18 15:19	06/12/18 04:04	1
Calcium	12		2.5	0.50	mg/L		06/08/18 15:19	06/12/18 04:04	1
Chromium	0.079		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 04:04	1
Cobalt	0.020	J	0.025	0.010	mg/L		06/08/18 15:19	06/12/18 04:04	1
Iron	86		0.40	0.20	mg/L		06/08/18 15:19	06/12/18 04:04	1
Lead	0.037		0.0075	0.0075	mg/L		06/08/18 15:19	06/12/18 04:04	1
Manganese	0.95		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 04:04	1
Nickel	0.070		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 04:04	1
Potassium	12	F1	2.5	0.50	mg/L		06/08/18 15:19	06/12/18 04:04	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:19	06/12/18 04:04	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:19	06/12/18 04:04	1
Zinc	0.22	J B	0.50	0.020	mg/L		06/08/18 15:19	06/12/18 04:04	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		06/08/18 15:19	06/09/18 15:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:19	06/09/18 15:38	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.018	0.0058	mg/Kg	☼	06/06/18 16:10	06/11/18 16:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.17	mg/Kg	☼	06/14/18 10:15	06/14/18 15:53	1
pH	7.4		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-2

Lab Sample ID: 500-146439-21

Date Collected: 06/04/18 12:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
1,1,2,2-Tetrachloroethane	<0.0017	*	0.0017	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
2-Hexanone	<0.0043	*	0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
4-Methyl-2-pentanone (MIBK)	<0.0043	*	0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Acetone	0.015	J	0.017	0.0075	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 20:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/05/18 15:57	06/12/18 20:04	1
4-Bromofluorobenzene (Surr)	109		75 - 131	06/05/18 15:57	06/12/18 20:04	1
Dibromofluoromethane	80		75 - 126	06/05/18 15:57	06/12/18 20:04	1
Toluene-d8 (Surr)	98		75 - 124	06/05/18 15:57	06/12/18 20:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-2

Lab Sample ID: 500-146439-21

Date Collected: 06/04/18 12:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-2

Lab Sample ID: 500-146439-21

Date Collected: 06/04/18 12:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	06/06/18 18:46	06/11/18 09:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	65		25 - 139				06/06/18 18:46	06/11/18 09:58	1
2-Fluorobiphenyl	83		44 - 121				06/06/18 18:46	06/11/18 09:58	1
2-Fluorophenol	104		46 - 133				06/06/18 18:46	06/11/18 09:58	1
Nitrobenzene-d5	77		41 - 120				06/06/18 18:46	06/11/18 09:58	1
Phenol-d5	96		46 - 125				06/06/18 18:46	06/11/18 09:58	1
Terphenyl-d14	97		35 - 160				06/06/18 18:46	06/11/18 09:58	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Arsenic	4.8		0.53	0.18	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Barium	17		0.53	0.061	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Beryllium	0.33		0.21	0.050	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Boron	6.1		2.7	0.25	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Cadmium	0.18	B	0.11	0.019	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Calcium	140000	B	110	18	mg/Kg	☼	06/06/18 16:35	06/09/18 02:21	10
Chromium	4.7		0.53	0.26	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Cobalt	4.0		0.27	0.070	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Copper	9.5		0.53	0.15	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Iron	13000	B	11	5.5	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Lead	7.5		0.27	0.12	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Magnesium	81000	B	53	26	mg/Kg	☼	06/06/18 16:35	06/09/18 02:21	10
Manganese	460		0.53	0.077	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Nickel	12		0.53	0.16	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Potassium	1100		27	9.4	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Sodium	150		53	7.9	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Vanadium	7.1		0.27	0.063	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1
Zinc	32		1.1	0.47	mg/Kg	☼	06/06/18 16:35	06/08/18 04:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:18	06/12/18 14:49	1
Barium	<0.50		0.50	0.050	mg/L		06/08/18 15:18	06/12/18 14:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:18	06/12/18 14:49	1
Boron	<0.10		0.10	0.050	mg/L		06/08/18 15:18	06/12/18 14:49	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B62-2

Lab Sample ID: 500-146439-21

Date Collected: 06/04/18 12:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/08/18 15:18	06/12/18 14:49	1
Calcium	9.6		2.5	0.50	mg/L		06/08/18 15:18	06/12/18 14:49	1
Chromium	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/12/18 14:49	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/12/18 14:49	1
Iron	1.4		0.40	0.20	mg/L		06/08/18 15:18	06/12/18 14:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:18	06/12/18 14:49	1
Manganese	0.012	J	0.025	0.010	mg/L		06/08/18 15:18	06/12/18 14:49	1
Nickel	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/12/18 14:49	1
Potassium	1.2	J	2.5	0.50	mg/L		06/08/18 15:18	06/12/18 14:49	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:18	06/12/18 14:49	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/12/18 14:49	1
Zinc	0.13	J B	0.50	0.020	mg/L		06/08/18 15:18	06/12/18 14:49	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:18	06/09/18 16:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:18	06/09/18 16:15	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 09:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.018	0.0059	mg/Kg	☼	06/06/18 16:10	06/11/18 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	06/14/18 10:15	06/14/18 15:53	1
pH	8.3		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B63-1

Lab Sample ID: 500-146439-22

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
1,1,2,2-Tetrachloroethane	<0.0018	*	0.0018	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
2-Hexanone	<0.0045	*	0.0045	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
4-Methyl-2-pentanone (MIBK)	<0.0045	*	0.0045	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Acetone	0.025		0.018	0.0078	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 20:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/05/18 15:57	06/12/18 20:30	1
4-Bromofluorobenzene (Surr)	109		75 - 131	06/05/18 15:57	06/12/18 20:30	1
Dibromofluoromethane	83		75 - 126	06/05/18 15:57	06/12/18 20:30	1
Toluene-d8 (Surr)	99		75 - 124	06/05/18 15:57	06/12/18 20:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B63-1

Lab Sample ID: 500-146439-22

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B63-1

Lab Sample ID: 500-146439-22

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	06/06/18 18:46	06/11/18 10:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		25 - 139				06/06/18 18:46	06/11/18 10:26	1
2-Fluorobiphenyl	90		44 - 121				06/06/18 18:46	06/11/18 10:26	1
2-Fluorophenol	117		46 - 133				06/06/18 18:46	06/11/18 10:26	1
Nitrobenzene-d5	86		41 - 120				06/06/18 18:46	06/11/18 10:26	1
Phenol-d5	106		46 - 125				06/06/18 18:46	06/11/18 10:26	1
Terphenyl-d14	107		35 - 160				06/06/18 18:46	06/11/18 10:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Arsenic	12		0.58	0.20	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Barium	56		0.58	0.066	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Beryllium	0.71		0.23	0.054	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Boron	4.5		2.9	0.27	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Cadmium	0.31	B	0.12	0.021	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Calcium	20000	B	12	2.0	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Chromium	13		0.58	0.29	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Cobalt	12		0.29	0.076	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Copper	25		0.58	0.16	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Iron	27000	B	12	6.0	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Lead	25		0.29	0.13	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Magnesium	14000		5.8	2.9	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Manganese	410		0.58	0.084	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Nickel	34		0.58	0.17	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Potassium	1300		29	10	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Selenium	1.4		0.58	0.34	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Silver	0.23	J	0.29	0.075	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Sodium	77		58	8.6	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Thallium	0.37	J	0.58	0.29	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Vanadium	19		0.29	0.068	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1
Zinc	98		1.2	0.51	mg/Kg	☼	06/06/18 16:37	06/07/18 22:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/08/18 15:21	06/11/18 18:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:21	06/11/18 18:54	1
Manganese	0.76		0.025	0.010	mg/L		06/08/18 15:21	06/11/18 18:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B63-1

Lab Sample ID: 500-146439-22

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:18	06/11/18 20:10	1
Barium	0.16	J	0.50	0.050	mg/L		06/08/18 15:18	06/11/18 20:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:18	06/11/18 20:10	1
Boron	0.091	J	0.10	0.050	mg/L		06/08/18 15:18	06/11/18 20:10	1
Cadmium	0.0021	J	0.0050	0.0020	mg/L		06/08/18 15:18	06/11/18 20:10	1
Calcium	14		2.5	0.50	mg/L		06/08/18 15:18	06/11/18 20:10	1
Chromium	0.044		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:10	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:10	1
Iron	41		0.40	0.20	mg/L		06/08/18 15:18	06/11/18 20:10	1
Lead	0.012		0.0075	0.0075	mg/L		06/08/18 15:18	06/11/18 20:10	1
Manganese	0.31		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:10	1
Nickel	0.037		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:10	1
Potassium	11		2.5	0.50	mg/L		06/08/18 15:18	06/11/18 20:10	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:18	06/11/18 20:10	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:10	1
Zinc	0.11	J B	0.50	0.020	mg/L		06/08/18 15:18	06/11/18 20:10	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:18	06/09/18 16:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:18	06/09/18 16:19	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 09:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.020	0.0067	mg/Kg	☼	06/06/18 16:10	06/11/18 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/14/18 10:15	06/14/18 15:53	1
pH	7.5		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B64-1

Lab Sample ID: 500-146439-23

Date Collected: 06/04/18 12:25

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0025		0.0025	0.00082	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00078	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
1,1-Dichloroethane	<0.0025		0.0025	0.00084	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
1,1-Dichloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
1,2-Dichloroethane	<0.0061		0.0061	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
1,2-Dichloropropane	<0.0025		0.0025	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
1,3-Dichloropropene, Total	<0.0025		0.0025	0.00086	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
2-Butanone (MEK)	<0.0061	*	0.0061	0.0027	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
2-Hexanone	<0.0061	*	0.0061	0.0019	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
4-Methyl-2-pentanone (MIBK)	<0.0061	*	0.0061	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Acetone	0.024	J*	0.025	0.011	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Benzene	<0.0025		0.0025	0.00063	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Bromodichloromethane	<0.0025		0.0025	0.00050	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Bromoform	<0.0025		0.0025	0.00072	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Bromomethane	<0.0061		0.0061	0.0023	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Carbon disulfide	<0.0061		0.0061	0.0013	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Carbon tetrachloride	<0.0025		0.0025	0.00071	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Chlorobenzene	<0.0025		0.0025	0.00091	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Chloroethane	<0.0061		0.0061	0.0018	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Chloroform	<0.0025		0.0025	0.00085	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Chloromethane	<0.0061		0.0061	0.0025	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00069	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00074	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Dibromochloromethane	<0.0025		0.0025	0.00080	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00072	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Methylene Chloride	<0.0061		0.0061	0.0024	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Styrene	<0.0025		0.0025	0.00074	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Tetrachloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Toluene	<0.0025		0.0025	0.00062	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00086	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Trichloroethene	<0.0025		0.0025	0.00083	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1
Xylenes, Total	<0.0049		0.0049	0.00079	mg/Kg	☼	06/05/18 15:57	06/11/18 21:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		70 - 134	06/05/18 15:57	06/11/18 21:26	1
4-Bromofluorobenzene (Surr)	118		75 - 131	06/05/18 15:57	06/11/18 21:26	1
Dibromofluoromethane	110		75 - 126	06/05/18 15:57	06/11/18 21:26	1
Toluene-d8 (Surr)	95		75 - 124	06/05/18 15:57	06/11/18 21:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B64-1

Lab Sample ID: 500-146439-23

Date Collected: 06/04/18 12:25

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Chrysene	<0.036		0.036	0.0098	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B64-1

Lab Sample ID: 500-146439-23

Date Collected: 06/04/18 12:25

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	06/06/18 18:46	06/11/18 10:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		25 - 139				06/06/18 18:46	06/11/18 10:53	1
2-Fluorobiphenyl	94		44 - 121				06/06/18 18:46	06/11/18 10:53	1
2-Fluorophenol	119		46 - 133				06/06/18 18:46	06/11/18 10:53	1
Nitrobenzene-d5	89		41 - 120				06/06/18 18:46	06/11/18 10:53	1
Phenol-d5	109		46 - 125				06/06/18 18:46	06/11/18 10:53	1
Terphenyl-d14	108		35 - 160				06/06/18 18:46	06/11/18 10:53	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	☼	06/06/18 16:37	06/07/18 23:02	1
Arsenic	9.5		0.57	0.19	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Barium	27		0.57	0.065	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Beryllium	0.47		0.23	0.053	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Boron	6.9		2.8	0.26	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Cadmium	0.24	B	0.11	0.020	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Calcium	130000	B	110	19	mg/Kg	☼	06/06/18 16:37	06/09/18 02:25	10
Chromium	7.7		0.57	0.28	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Cobalt	5.7		0.28	0.074	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Copper	14		0.57	0.16	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Iron	20000	B	11	5.9	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Lead	13		0.28	0.13	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Magnesium	54000		5.7	2.8	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Manganese	510		0.57	0.082	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Nickel	17		0.57	0.17	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Potassium	1200		28	10	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Selenium	0.65		0.57	0.33	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Silver	0.12	J	0.28	0.073	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Sodium	140		57	8.4	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Vanadium	10		0.28	0.067	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1
Zinc	44		1.1	0.50	mg/Kg	☼	06/06/18 16:37	06/07/18 23:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.20		0.20	0.20	mg/L		06/08/18 15:21	06/11/18 18:58	1
Manganese	1.4		0.025	0.010	mg/L		06/08/18 15:21	06/11/18 18:58	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Client Sample ID: 1628V2-1-B64-1

Lab Sample ID: 500-146439-23

Date Collected: 06/04/18 12:25

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/08/18 15:18	06/11/18 20:22	1
Barium	0.085	J	0.50	0.050	mg/L		06/08/18 15:18	06/11/18 20:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/08/18 15:18	06/11/18 20:22	1
Boron	0.064	J	0.10	0.050	mg/L		06/08/18 15:18	06/11/18 20:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/08/18 15:18	06/11/18 20:22	1
Calcium	12		2.5	0.50	mg/L		06/08/18 15:18	06/11/18 20:22	1
Chromium	0.025		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:22	1
Cobalt	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:22	1
Iron	23		0.40	0.20	mg/L		06/08/18 15:18	06/11/18 20:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/08/18 15:18	06/11/18 20:22	1
Manganese	0.17		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:22	1
Nickel	0.022	J	0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:22	1
Potassium	7.6	F1	2.5	0.50	mg/L		06/08/18 15:18	06/11/18 20:22	1
Selenium	<0.050		0.050	0.020	mg/L		06/08/18 15:18	06/11/18 20:22	1
Silver	<0.025		0.025	0.010	mg/L		06/08/18 15:18	06/11/18 20:22	1
Zinc	0.070	J B	0.50	0.020	mg/L		06/08/18 15:18	06/11/18 20:22	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/08/18 15:18	06/09/18 16:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/08/18 15:18	06/09/18 16:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 09:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.016	0.0054	mg/Kg	☼	06/06/18 16:10	06/11/18 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/14/18 10:15	06/14/18 15:54	1
pH	8.0		0.20	0.20	SU			06/11/18 16:52	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
E	Result exceeded calibration range.

Metals

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

General Chemistry

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.

Glossary

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

TestAmerica Chicago

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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)

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Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146439-1

Laboratory: TestAmerica Chicago


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

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

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

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

CHAIN OF CUSTODY RECORD

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com		Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>I-80 WILL COUNTY</u> Project No.: <u>PT/3184-006/AE7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>FBD</u> Sampler:	COC No.: _____ of _____ Lab Job No.: <u>500-146439</u> Sample Temp: <u>12.2, 0.8, 2.3, 4.1, 3.6</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds Glass-I Standard, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	1628V2-1-B60	6/4	1250	S	X	X					X	X	X	X	X		0-3.5 TB16
2	1628V2-1-B61		1705														0-6.5 TB16
3	1628V2-1-B78		1370														0-5 TB16
4	1628V2-1-B80		0855														TB 17
5	1628V2-1-B79-1		0910														
6	1628V2-1-B79-2		0920														
7	1628V2-1-B43-1		0945														
8	1628V2-1-B42-1		1000														
9	1628V2-1-B41-1		1010														
10	1628V2-1-B41-2		1015														
11	1628V2-1-B65-2		1245														
12	Tip Blank #16			S	X												

Matrix Key: 2,2,3,3
 W: Water
 S: Soil
 SL: Sludge
 S: Sediment
 L: Leachate
 DW: Drinking Water
 OL: Oil
 O: Other

Relinquished by: <u>[Signature]</u>	Date/Time: <u>6-5-18 1240</u>	Received by: <u>[Signature] JA</u>	Date/Time: <u>6/5/18 1240</u>
Relinquished by: <u>[Signature] JA</u>	Date/Time: <u>6/5/18 1400</u>	Received by: <u>[Signature] TA-CHI</u>	Date/Time: <u>6/5/18 1400</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

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: 500-146443-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/18/2018 1:48:40 PM

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

LINKS

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results through
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www.testamericainc.com

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

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

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

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Sample Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-146443-1	1628V2-1-B73-1	Solid	06/04/18 10:10	06/05/18 14:00
500-146443-2	1628V2-1-B73-2	Solid	06/04/18 10:15	06/05/18 14:00
500-146443-3	1628V2-1-B53	Solid	06/04/18 11:35	06/05/18 14:00
500-146443-4	1628V2-1-B54	Solid	06/04/18 11:45	06/05/18 14:00
500-146443-5	1628V2-1-B55	Solid	06/04/18 11:55	06/05/18 14:00
500-146443-6	1628V2-1-B56	Solid	06/04/18 12:05	06/05/18 14:00
500-146443-7	1628V2-1-B57	Solid	06/04/18 12:15	06/05/18 14:00
500-146443-8	1628V2-1-B58	Solid	06/04/18 12:30	06/05/18 14:00
500-146443-9	1628V2-1-B59	Solid	06/04/18 12:40	06/05/18 14:00
500-146443-10	1628V2-1-B59 Dup	Solid	06/04/18 12:45	06/05/18 14:00
500-146443-11	Trip Blank #15	Solid	06/04/18 00:00	06/05/18 14:00
500-146443-12	1628V2-1-B64-2	Solid	06/04/18 12:30	06/05/18 14:00
500-146443-13	1628V2-1-B65-1	Solid	06/04/18 12:40	06/05/18 14:00
500-146443-14	1628V2-1-B66-1	Solid	06/04/18 12:50	06/05/18 14:00
500-146443-15	1628V2-1-B67-1	Solid	06/04/18 13:00	06/05/18 14:00
500-146443-16	1628V2-1-B67-2	Solid	06/04/18 13:10	06/05/18 14:00
500-146443-22	1628V2-1-C34	Water	06/04/18 14:05	06/05/18 14:00
500-146443-23	1628V2-1-C08	Water	06/04/18 14:25	06/05/18 14:00
500-146443-24	Trip Blank #20	Water	06/04/18 00:00	06/05/18 14:00
500-146443-25	Trip Blank #18	Solid	06/04/18 00:00	06/05/18 14:00

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B55

Lab Sample ID: 500-146443-5

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 15:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	130		70 - 134	06/05/18 15:57	06/12/18 15:45	1
4-Bromofluorobenzene (Surr)	114		75 - 131	06/05/18 15:57	06/12/18 15:45	1
Dibromofluoromethane	113		75 - 126	06/05/18 15:57	06/12/18 15:45	1
Toluene-d8 (Surr)	111		75 - 124	06/05/18 15:57	06/12/18 15:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B55

Lab Sample ID: 500-146443-5

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2-Methylnaphthalene	0.012	J	0.082	0.0075	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Acenaphthene	0.0074	J	0.040	0.0073	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Acenaphthylene	0.042		0.040	0.0054	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Anthracene	0.027	J	0.040	0.0068	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Benzo[a]anthracene	0.12		0.040	0.0055	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Benzo[a]pyrene	0.17		0.040	0.0079	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Benzo[b]fluoranthene	0.32		0.040	0.0088	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Benzo[g,h,i]perylene	0.11		0.040	0.013	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Benzo[k]fluoranthene	0.087		0.040	0.012	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Bis(2-ethylhexyl) phthalate	0.11	J	0.20	0.074	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Carbazole	0.14	J	0.20	0.10	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Chrysene	0.16		0.040	0.011	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Dibenz(a,h)anthracene	0.016	J	0.040	0.0078	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Fluoranthene	0.20		0.040	0.0075	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B55

Lab Sample ID: 500-146443-5

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.11		0.040	0.011	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Phenanthrene	0.079		0.040	0.0057	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Pyrene	0.29		0.040	0.0081	mg/Kg	☼	06/08/18 18:19	06/14/18 18:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		25 - 139				06/08/18 18:19	06/14/18 18:27	1
2-Fluorobiphenyl	83		44 - 121				06/08/18 18:19	06/14/18 18:27	1
2-Fluorophenol	114		46 - 133				06/08/18 18:19	06/14/18 18:27	1
Nitrobenzene-d5	82		41 - 120				06/08/18 18:19	06/14/18 18:27	1
Phenol-d5	112		46 - 125				06/08/18 18:19	06/14/18 18:27	1
Terphenyl-d14	140		35 - 160				06/08/18 18:19	06/14/18 18:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J	1.2	0.23	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Arsenic	7.1		0.59	0.20	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Barium	71		0.59	0.068	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Beryllium	0.56		0.24	0.055	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Boron	6.9		3.0	0.28	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Cadmium	0.59	B	0.12	0.021	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Calcium	73000	B	120	20	mg/Kg	☼	06/07/18 17:02	06/12/18 00:27	10
Chromium	40		0.59	0.29	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Cobalt	9.0		0.30	0.078	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Copper	25		0.59	0.17	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Iron	17000		12	6.2	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Lead	140		0.30	0.14	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Magnesium	31000	B	5.9	2.9	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Manganese	700	B	0.59	0.086	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Nickel	20		0.59	0.17	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Potassium	1200		30	10	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Selenium	0.69		0.59	0.35	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Silver	0.20	J	0.30	0.076	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Sodium	910		59	8.8	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Thallium	<0.59		0.59	0.30	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Vanadium	26		0.30	0.070	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1
Zinc	210		1.2	0.52	mg/Kg	☼	06/07/18 17:02	06/08/18 21:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 16:39	1
Iron	<0.40		0.40	0.20	mg/L		06/12/18 07:26	06/12/18 16:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:26	06/12/18 16:39	1
Manganese	0.13		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 16:39	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B55

Lab Sample ID: 500-146443-5

Date Collected: 06/04/18 11:55

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.010	J	0.050	0.010	mg/L		06/12/18 07:22	06/12/18 16:57	1
Barium	0.43	J	0.50	0.050	mg/L		06/12/18 07:22	06/12/18 16:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 16:57	1
Boron	0.098	J	0.10	0.050	mg/L		06/12/18 07:22	06/12/18 16:57	1
Cadmium	0.0025	J	0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 16:57	1
Calcium	19		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 16:57	1
Chromium	0.12		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 16:57	1
Cobalt	0.015	J	0.025	0.010	mg/L		06/12/18 07:22	06/12/18 16:57	1
Iron	93		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 16:57	1
Lead	0.15		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 16:57	1
Manganese	0.77		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 16:57	1
Nickel	0.071		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 16:57	1
Potassium	19		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 16:57	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 16:57	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 16:57	1
Zinc	0.65		0.50	0.020	mg/L		06/12/18 07:22	06/12/18 16:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:26	06/13/18 14:38	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:17	1
Thallium	0.0026		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:17	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	B	0.019	0.0065	mg/Kg	☼	06/08/18 16:15	06/11/18 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.24	J	0.55	0.19	mg/Kg	☼	06/14/18 10:15	06/14/18 15:47	1
pH	8.8		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B56

Lab Sample ID: 500-146443-6

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00088	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
1,2-Dichloropropane	<0.0020		0.0020	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00072	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Acetone	0.031		0.020	0.0089	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Bromodichloromethane	<0.0020		0.0020	0.00042	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Bromoform	<0.0020		0.0020	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Chloroform	<0.0020		0.0020	0.00071	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Dibromochloromethane	<0.0020		0.0020	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Ethylbenzene	<0.0020		0.0020	0.00098	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Styrene	<0.0020		0.0020	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Tetrachloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Toluene	<0.0020		0.0020	0.00052	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00091	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00072	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	06/05/18 15:57	06/12/18 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	128		70 - 134	06/05/18 15:57	06/12/18 16:13	1
4-Bromofluorobenzene (Surr)	102		75 - 131	06/05/18 15:57	06/12/18 16:13	1
Dibromofluoromethane	112		75 - 126	06/05/18 15:57	06/12/18 16:13	1
Toluene-d8 (Surr)	110		75 - 124	06/05/18 15:57	06/12/18 16:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B56

Lab Sample ID: 500-146443-6

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Acenaphthylene	0.017	J	0.037	0.0050	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Anthracene	0.012	J	0.037	0.0063	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Benzo[a]anthracene	0.053		0.037	0.0051	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Benzo[a]pyrene	0.077		0.037	0.0073	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Benzo[b]fluoranthene	0.14		0.037	0.0081	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Benzo[g,h,i]perylene	0.052		0.037	0.012	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Benzo[k]fluoranthene	0.049		0.037	0.011	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Carbazole	0.12	J	0.19	0.094	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Chrysene	0.077		0.037	0.010	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Fluoranthene	0.090		0.037	0.0070	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B56

Lab Sample ID: 500-146443-6

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Phenanthrene	0.042		0.037	0.0053	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Pyrene	0.13		0.037	0.0075	mg/Kg	☼	06/08/18 18:19	06/14/18 18:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		25 - 139				06/08/18 18:19	06/14/18 18:54	1
2-Fluorobiphenyl	80		44 - 121				06/08/18 18:19	06/14/18 18:54	1
2-Fluorophenol	111		46 - 133				06/08/18 18:19	06/14/18 18:54	1
Nitrobenzene-d5	78		41 - 120				06/08/18 18:19	06/14/18 18:54	1
Phenol-d5	101		46 - 125				06/08/18 18:19	06/14/18 18:54	1
Terphenyl-d14	156		35 - 160				06/08/18 18:19	06/14/18 18:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Arsenic	3.7		0.54	0.18	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Barium	27		0.54	0.061	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Beryllium	0.28		0.22	0.050	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Boron	13		2.7	0.25	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Cadmium	0.20	B	0.11	0.019	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Calcium	190000	B	110	18	mg/Kg	☼	06/07/18 17:02	06/12/18 00:31	10
Chromium	8.8		0.54	0.27	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Cobalt	2.8		0.27	0.071	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Copper	9.3		0.54	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Iron	8000		11	5.6	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Lead	14		0.27	0.12	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Magnesium	110000	B	54	27	mg/Kg	☼	06/07/18 17:02	06/12/18 00:31	10
Manganese	300	B	0.54	0.078	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Nickel	6.6		0.54	0.16	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Potassium	990		27	9.5	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Sodium	2100		54	8.0	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Vanadium	10		0.27	0.064	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1
Zinc	43		1.1	0.47	mg/Kg	☼	06/07/18 17:02	06/08/18 21:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/12/18 07:26	06/12/18 16:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:26	06/12/18 16:43	1
Manganese	2.9		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 16:43	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B56

Lab Sample ID: 500-146443-6

Date Collected: 06/04/18 12:05

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.013	J	0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:01	1
Barium	0.30	J	0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:01	1
Boron	0.11		0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:01	1
Cadmium	0.0025	J	0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:01	1
Calcium	18		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:01	1
Chromium	0.086		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:01	1
Cobalt	0.018	J	0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:01	1
Iron	79		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:01	1
Lead	0.12		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:01	1
Manganese	0.67		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:01	1
Nickel	0.063		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:01	1
Potassium	18		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:01	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:01	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:01	1
Zinc	0.37	J	0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:26	06/13/18 14:39	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:19	1
Thallium	0.0026		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:19	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J B	0.018	0.0059	mg/Kg	☼	06/08/18 16:15	06/11/18 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.38	J	0.50	0.17	mg/Kg	☼	06/14/18 20:00	06/15/18 14:14	1
pH	8.5		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00094	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1-Dichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00077	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
2-Butanone (MEK)	<0.0055		0.0055	0.0024	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Acetone	0.032		0.022	0.0095	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Benzene	<0.0022		0.0022	0.00056	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Bromoform	<0.0022		0.0022	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Carbon disulfide	<0.0055		0.0055	0.0011	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chlorobenzene	<0.0022		0.0022	0.00081	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chloroethane	<0.0055		0.0055	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chloroform	<0.0022		0.0022	0.00076	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Dibromochloromethane	<0.0022		0.0022	0.00072	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Methylene Chloride	<0.0055		0.0055	0.0022	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Tetrachloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00097	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00077	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Trichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Vinyl chloride	<0.0022		0.0022	0.00097	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Xylenes, Total	<0.0044		0.0044	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		70 - 134	06/05/18 15:57	06/12/18 16:40	1
4-Bromofluorobenzene (Surr)	103		75 - 131	06/05/18 15:57	06/12/18 16:40	1
Dibromofluoromethane	109		75 - 126	06/05/18 15:57	06/12/18 16:40	1
Toluene-d8 (Surr)	110		75 - 124	06/05/18 15:57	06/12/18 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Methylnaphthalene	<0.070		0.070	0.0063	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Nitrophenol	<0.34		0.34	0.081	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Anthracene	<0.034		0.034	0.0058	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[a]anthracene	0.022	J	0.034	0.0046	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[a]pyrene	0.034		0.034	0.0067	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[b]fluoranthene	0.054		0.034	0.0074	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[k]fluoranthene	0.013	J	0.034	0.010	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Carbazole	<0.17		0.17	0.086	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Chrysene	0.032	J	0.034	0.0094	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Fluoranthene	0.038		0.034	0.0064	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.024	J	0.034	0.0089	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Pentachlorophenol	<0.70		0.70	0.55	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Phenanthrene	0.013	J	0.034	0.0048	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Pyrene	0.039		0.034	0.0069	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		25 - 139				06/08/18 18:19	06/14/18 13:49	1
2-Fluorobiphenyl	93		44 - 121				06/08/18 18:19	06/14/18 13:49	1
2-Fluorophenol	115		46 - 133				06/08/18 18:19	06/14/18 13:49	1
Nitrobenzene-d5	89		41 - 120				06/08/18 18:19	06/14/18 13:49	1
Phenol-d5	112		46 - 125				06/08/18 18:19	06/14/18 13:49	1
Terphenyl-d14	102		35 - 160				06/08/18 18:19	06/14/18 13:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Arsenic	1.7		0.52	0.18	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Barium	12		0.52	0.059	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Beryllium	0.22		0.21	0.048	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Boron	16		2.6	0.24	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Cadmium	0.14	B	0.10	0.019	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Calcium	200000	B	100	18	mg/Kg	☼	06/07/18 17:02	06/12/18 00:35	10
Chromium	7.3		0.52	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Cobalt	1.8		0.26	0.068	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Copper	5.5		0.52	0.14	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Iron	4700		10	5.4	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Lead	18		0.26	0.12	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Magnesium	120000	B	52	26	mg/Kg	☼	06/07/18 17:02	06/12/18 00:35	10
Manganese	290	B	0.52	0.075	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Nickel	3.9		0.52	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Potassium	1100		26	9.1	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Selenium	<0.52		0.52	0.30	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Sodium	1700		52	7.6	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Vanadium	7.2		0.26	0.061	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Zinc	25		1.0	0.45	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Barium	<0.50		0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:05	1
Boron	<0.10		0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:05	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:05	1
Calcium	5.4		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:05	1
Chromium	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Cobalt	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Iron	0.29	J	0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:05	1
Manganese	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Nickel	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Potassium	0.86	J	2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:05	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:05	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Zinc	<0.50		0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:05	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:21	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	B	0.017	0.0057	mg/Kg	☼	06/08/18 16:15	06/11/18 17:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	06/14/18 20:00	06/15/18 14:15	1
pH	8.9		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B64-2

Lab Sample ID: 500-146443-12

Date Collected: 06/04/18 12:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
2-Butanone (MEK)	0.0048	J	0.0050	0.0022	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Acetone	0.040		0.020	0.0086	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		70 - 134	06/05/18 15:57	06/12/18 18:53	1
4-Bromofluorobenzene (Surr)	102		75 - 131	06/05/18 15:57	06/12/18 18:53	1
Dibromofluoromethane	111		75 - 126	06/05/18 15:57	06/12/18 18:53	1
Toluene-d8 (Surr)	110		75 - 124	06/05/18 15:57	06/12/18 18:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B64-2

Lab Sample ID: 500-146443-12

Date Collected: 06/04/18 12:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2,4-Dinitrophenol	<0.69		0.69	0.60	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
2-Nitrophenol	<0.34		0.34	0.081	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.27	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
4-Nitrophenol	<0.69		0.69	0.32	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Anthracene	<0.034		0.034	0.0057	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Benzo[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Benzo[a]pyrene	<0.034		0.034	0.0066	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Benzo[b]fluoranthene	<0.034		0.034	0.0074	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.062	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Chrysene	<0.034		0.034	0.0093	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0066	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Fluoranthene	<0.034		0.034	0.0063	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Hexachlorobenzene	<0.069		0.069	0.0079	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B64-2

Lab Sample ID: 500-146443-12

Date Collected: 06/04/18 12:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0088	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Naphthalene	<0.034		0.034	0.0052	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
N-Nitrosodi-n-propylamine	<0.069		0.069	0.042	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Phenanthrene	<0.034		0.034	0.0047	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Phenol	<0.17		0.17	0.076	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Pyrene	<0.034		0.034	0.0068	mg/Kg	☼	06/08/18 18:19	06/12/18 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	68		25 - 139				06/08/18 18:19	06/12/18 17:09	1
2-Fluorobiphenyl	86		44 - 121				06/08/18 18:19	06/12/18 17:09	1
2-Fluorophenol	113		46 - 133				06/08/18 18:19	06/12/18 17:09	1
Nitrobenzene-d5	90		41 - 120				06/08/18 18:19	06/12/18 17:09	1
Phenol-d5	106		46 - 125				06/08/18 18:19	06/12/18 17:09	1
Terphenyl-d14	95		35 - 160				06/08/18 18:19	06/12/18 17:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Arsenic	5.7		0.50	0.17	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Barium	9.4		0.50	0.057	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Beryllium	0.31		0.20	0.047	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Boron	6.9		2.5	0.23	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Cadmium	0.21	B	0.10	0.018	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Calcium	180000	B	100	17	mg/Kg	☼	06/07/18 17:02	06/13/18 13:57	10
Chromium	4.3		0.50	0.25	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Cobalt	3.0		0.25	0.066	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Copper	9.9		0.50	0.14	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Iron	15000		10	5.2	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Lead	6.7		0.25	0.12	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Magnesium	96000	B	50	25	mg/Kg	☼	06/07/18 17:02	06/13/18 13:57	10
Manganese	470	B	0.50	0.073	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Nickel	8.5		0.50	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Potassium	880		25	8.9	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Selenium	0.35	J	0.50	0.30	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Silver	<0.25		0.25	0.065	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Sodium	150		50	7.5	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Vanadium	6.3		0.25	0.059	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1
Zinc	42		1.0	0.44	mg/Kg	☼	06/07/18 17:02	06/08/18 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:33	1
Barium	<0.50		0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:33	1
Boron	0.064	J	0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:33	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B64-2

Lab Sample ID: 500-146443-12

Date Collected: 06/04/18 12:30

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:33	1
Calcium	8.8		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:33	1
Chromium	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:33	1
Cobalt	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:33	1
Iron	<0.40		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:33	1
Manganese	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:33	1
Nickel	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:33	1
Potassium	<2.5		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:33	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:33	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:33	1
Zinc	<0.50		0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:33	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:40	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J B	0.018	0.0059	mg/Kg	☼	06/08/18 16:15	06/11/18 17:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	06/14/18 20:00	06/15/18 14:16	1
pH	8.2		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B65-1

Lab Sample ID: 500-146443-13

Date Collected: 06/04/18 12:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		70 - 134	06/05/18 15:57	06/12/18 19:20	1
4-Bromofluorobenzene (Surr)	104		75 - 131	06/05/18 15:57	06/12/18 19:20	1
Dibromofluoromethane	110		75 - 126	06/05/18 15:57	06/12/18 19:20	1
Toluene-d8 (Surr)	109		75 - 124	06/05/18 15:57	06/12/18 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B65-1

Lab Sample ID: 500-146443-13

Date Collected: 06/04/18 12:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Benzo[a]anthracene	0.0053	J	0.038	0.0052	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Benzo[a]pyrene	0.013	J	0.038	0.0075	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Benzo[b]fluoranthene	0.014	J	0.038	0.0083	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Fluoranthene	0.0097	J	0.038	0.0072	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B65-1

Lab Sample ID: 500-146443-13

Date Collected: 06/04/18 12:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.011	J	0.038	0.010	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Phenanthrene	0.0072	J	0.038	0.0054	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Pyrene	0.0078	J	0.038	0.0077	mg/Kg	☼	06/08/18 18:19	06/12/18 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		25 - 139				06/08/18 18:19	06/12/18 17:35	1
2-Fluorobiphenyl	93		44 - 121				06/08/18 18:19	06/12/18 17:35	1
2-Fluorophenol	125		46 - 133				06/08/18 18:19	06/12/18 17:35	1
Nitrobenzene-d5	97		41 - 120				06/08/18 18:19	06/12/18 17:35	1
Phenol-d5	116		46 - 125				06/08/18 18:19	06/12/18 17:35	1
Terphenyl-d14	104		35 - 160				06/08/18 18:19	06/12/18 17:35	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	☼	06/07/18 17:02	06/08/18 22:00	1
Arsenic	7.8		0.56	0.19	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Barium	87		0.56	0.064	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Beryllium	0.62		0.23	0.053	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Boron	2.9		2.8	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Cadmium	0.25	B	0.11	0.020	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Calcium	3200	B	11	1.9	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Chromium	13		0.56	0.28	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Cobalt	10		0.28	0.074	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Copper	14		0.56	0.16	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Iron	17000		11	5.9	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Lead	19		0.28	0.13	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Magnesium	3000	B	5.6	2.8	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Manganese	620	B	0.56	0.082	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Nickel	17		0.56	0.16	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Potassium	980		28	10	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Selenium	1.2		0.56	0.33	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Silver	0.21	J	0.28	0.073	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Sodium	120		56	8.3	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Vanadium	23		0.28	0.066	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1
Zinc	54		1.1	0.49	mg/Kg	☼	06/07/18 17:02	06/08/18 22:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/12/18 07:26	06/12/18 17:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:26	06/12/18 17:08	1
Manganese	0.12		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 17:08	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B65-1

Lab Sample ID: 500-146443-13

Date Collected: 06/04/18 12:40

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:45	1
Barium	0.31	J	0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:45	1
Boron	0.061	J	0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:45	1
Calcium	11		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:45	1
Chromium	0.052		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:45	1
Cobalt	0.011	J	0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:45	1
Iron	50		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:45	1
Lead	0.022		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:45	1
Manganese	1.0		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:45	1
Nickel	0.043		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:45	1
Potassium	7.8		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:45	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:45	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:45	1
Zinc	0.14	J	0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:45	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:42	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	B	0.019	0.0063	mg/Kg	☼	06/08/18 16:15	06/11/18 17:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/14/18 20:00	06/15/18 14:17	1
pH	7.5		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B66-1

Lab Sample ID: 500-146443-14

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Acetone	0.023		0.018	0.0079	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		70 - 134	06/05/18 15:57	06/12/18 19:47	1
4-Bromofluorobenzene (Surr)	104		75 - 131	06/05/18 15:57	06/12/18 19:47	1
Dibromofluoromethane	113		75 - 126	06/05/18 15:57	06/12/18 19:47	1
Toluene-d8 (Surr)	109		75 - 124	06/05/18 15:57	06/12/18 19:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B66-1

Lab Sample ID: 500-146443-14

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B66-1

Lab Sample ID: 500-146443-14

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/08/18 18:19	06/12/18 18:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	62		25 - 139				06/08/18 18:19	06/12/18 18:01	1
2-Fluorobiphenyl	82		44 - 121				06/08/18 18:19	06/12/18 18:01	1
2-Fluorophenol	113		46 - 133				06/08/18 18:19	06/12/18 18:01	1
Nitrobenzene-d5	89		41 - 120				06/08/18 18:19	06/12/18 18:01	1
Phenol-d5	109		46 - 125				06/08/18 18:19	06/12/18 18:01	1
Terphenyl-d14	96		35 - 160				06/08/18 18:19	06/12/18 18:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Arsenic	8.0		0.55	0.19	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Barium	50		0.55	0.063	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Beryllium	0.55		0.22	0.052	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Boron	3.8		2.8	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Cadmium	0.17	B	0.11	0.020	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Calcium	2800	B	11	1.9	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Chromium	11		0.55	0.27	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Cobalt	8.8		0.28	0.072	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Copper	18		0.55	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Iron	17000		11	5.7	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Lead	14		0.28	0.13	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Magnesium	3000	B	5.5	2.7	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Manganese	430	B	0.55	0.080	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Nickel	20		0.55	0.16	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Potassium	940		28	9.8	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Selenium	0.90		0.55	0.32	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Silver	0.22	J	0.28	0.071	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Sodium	39	J	55	8.2	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Vanadium	20		0.28	0.065	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1
Zinc	49		1.1	0.48	mg/Kg	☼	06/07/18 17:02	06/08/18 22:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/12/18 07:26	06/12/18 17:12	1
Manganese	0.27		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 17:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B66-1

Lab Sample ID: 500-146443-14

Date Collected: 06/04/18 12:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:49	1
Barium	0.20	J	0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:49	1
Boron	0.066	J	0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:49	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:49	1
Calcium	11		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:49	1
Chromium	0.045		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:49	1
Cobalt	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:49	1
Iron	45		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:49	1
Manganese	0.55		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:49	1
Nickel	0.036		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:49	1
Potassium	8.5		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:49	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:49	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:49	1
Zinc	0.12	J	0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:49	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:44	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 11:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	B	0.019	0.0064	mg/Kg	☼	06/08/18 16:15	06/11/18 17:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.16	mg/Kg	☼	06/14/18 20:00	06/15/18 14:17	1
pH	7.7		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-1

Lab Sample ID: 500-146443-15

Date Collected: 06/04/18 13:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Acetone	0.010	J	0.020	0.0087	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125		70 - 134	06/05/18 15:57	06/12/18 20:14	1
4-Bromofluorobenzene (Surr)	108		75 - 131	06/05/18 15:57	06/12/18 20:14	1
Dibromofluoromethane	118		75 - 126	06/05/18 15:57	06/12/18 20:14	1
Toluene-d8 (Surr)	108		75 - 124	06/05/18 15:57	06/12/18 20:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-1

Lab Sample ID: 500-146443-15

Date Collected: 06/04/18 13:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-1

Lab Sample ID: 500-146443-15

Date Collected: 06/04/18 13:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	06/08/18 18:19	06/12/18 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		25 - 139				06/08/18 18:19	06/12/18 18:28	1
2-Fluorobiphenyl	86		44 - 121				06/08/18 18:19	06/12/18 18:28	1
2-Fluorophenol	117		46 - 133				06/08/18 18:19	06/12/18 18:28	1
Nitrobenzene-d5	91		41 - 120				06/08/18 18:19	06/12/18 18:28	1
Phenol-d5	108		46 - 125				06/08/18 18:19	06/12/18 18:28	1
Terphenyl-d14	99		35 - 160				06/08/18 18:19	06/12/18 18:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Arsenic	6.7		0.59	0.20	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Barium	110		0.59	0.068	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Beryllium	0.72		0.24	0.055	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Boron	3.8		3.0	0.28	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Cadmium	0.21	B	0.12	0.021	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Calcium	2300	B	12	2.0	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Chromium	16		0.59	0.29	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Cobalt	15		0.30	0.078	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Copper	16		0.59	0.17	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Iron	19000		12	6.2	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Lead	17		0.30	0.14	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Magnesium	3100	B	5.9	2.9	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Manganese	790	B	0.59	0.086	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Nickel	25		0.59	0.17	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Potassium	1100		30	10	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Selenium	1.1		0.59	0.35	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Silver	0.28	J	0.30	0.076	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Sodium	58	J	59	8.8	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Thallium	<0.59		0.59	0.30	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Vanadium	28		0.30	0.070	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1
Zinc	58		1.2	0.52	mg/Kg	☼	06/07/18 17:02	06/08/18 22:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/12/18 07:26	06/12/18 17:16	1
Manganese	0.018	J	0.025	0.010	mg/L		06/12/18 07:26	06/12/18 17:16	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-1

Lab Sample ID: 500-146443-15

Date Collected: 06/04/18 13:00

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:53	1
Barium	0.34	J	0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:53	1
Boron	0.061	J	0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:53	1
Calcium	9.1		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:53	1
Chromium	0.068		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:53	1
Cobalt	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:53	1
Iron	72		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:53	1
Manganese	0.40		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:53	1
Nickel	0.060		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:53	1
Potassium	8.3		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:53	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:53	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:53	1
Zinc	0.17	J	0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:53	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:46	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 11:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037	B	0.019	0.0065	mg/Kg	☼	06/08/18 16:15	06/11/18 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	06/14/18 20:00	06/15/18 14:17	1
pH	7.3		0.20	0.20	SU			06/11/18 16:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-2

Lab Sample ID: 500-146443-16

Date Collected: 06/04/18 13:10

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
1,1,1,2-Tetrachloroethane	<0.0017	*	0.0017	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
2-Hexanone	<0.0042	*	0.0042	0.0013	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
4-Methyl-2-pentanone (MIBK)	<0.0042	*	0.0042	0.0012	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Acetone	0.034		0.017	0.0073	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Chloromethane	<0.0042	*	0.0042	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Vinyl chloride	<0.0017	*	0.0017	0.00074	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	06/05/18 15:57	06/12/18 23:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	06/05/18 15:57	06/12/18 23:57	1
4-Bromofluorobenzene (Surr)	106		75 - 131	06/05/18 15:57	06/12/18 23:57	1
Dibromofluoromethane	80		75 - 126	06/05/18 15:57	06/12/18 23:57	1
Toluene-d8 (Surr)	97		75 - 124	06/05/18 15:57	06/12/18 23:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-2

Lab Sample ID: 500-146443-16

Date Collected: 06/04/18 13:10

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-2

Lab Sample ID: 500-146443-16

Date Collected: 06/04/18 13:10

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	06/08/18 18:19	06/12/18 18:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		25 - 139				06/08/18 18:19	06/12/18 18:54	1
2-Fluorobiphenyl	87		44 - 121				06/08/18 18:19	06/12/18 18:54	1
2-Fluorophenol	118		46 - 133				06/08/18 18:19	06/12/18 18:54	1
Nitrobenzene-d5	94		41 - 120				06/08/18 18:19	06/12/18 18:54	1
Phenol-d5	111		46 - 125				06/08/18 18:19	06/12/18 18:54	1
Terphenyl-d14	103		35 - 160				06/08/18 18:19	06/12/18 18:54	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	☼	06/07/18 17:02	06/08/18 22:20	1
Arsenic	8.5		0.55	0.19	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Barium	35		0.55	0.063	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Beryllium	0.56		0.22	0.052	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Boron	5.2		2.8	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Cadmium	0.22	B	0.11	0.020	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Calcium	1500	B	11	1.9	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Chromium	12		0.55	0.27	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Cobalt	9.7		0.28	0.073	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Copper	22		0.55	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Iron	18000		11	5.8	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Lead	14		0.28	0.13	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Magnesium	2700	B	5.5	2.7	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Manganese	410	B	0.55	0.080	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Nickel	24		0.55	0.16	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Potassium	1100		28	9.8	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Selenium	0.98		0.55	0.33	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Silver	0.21	J	0.28	0.071	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Sodium	47	J	55	8.2	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Thallium	0.44	J	0.55	0.28	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Vanadium	18		0.28	0.065	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1
Zinc	60		1.1	0.49	mg/Kg	☼	06/07/18 17:02	06/08/18 22:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/12/18 07:26	06/12/18 17:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:26	06/12/18 17:28	1
Manganese	0.033		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 17:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B67-2

Lab Sample ID: 500-146443-16

Date Collected: 06/04/18 13:10

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.018	J	0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:57	1
Barium	0.36	J	0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:57	1
Beryllium	0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:57	1
Boron	0.12		0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:57	1
Cadmium	0.0021	J	0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:57	1
Calcium	9.4		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:57	1
Chromium	0.094		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:57	1
Cobalt	0.014	J	0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:57	1
Iron	100		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:57	1
Lead	0.020		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:57	1
Manganese	0.75		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:57	1
Nickel	0.088		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:57	1
Potassium	20		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:57	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:57	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:57	1
Zinc	0.28	J	0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:26	06/13/18 14:40	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:48	1
Thallium	0.0024		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:48	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 11:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	B	0.018	0.0061	mg/Kg	☼	06/08/18 16:15	06/11/18 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.16	mg/Kg	☼	06/14/18 20:00	06/15/18 14:18	1
pH	7.3		0.20	0.20	SU			06/11/18 16:52	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
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.
X	Surrogate is outside control limits
E	Result exceeded calibration range.
*	RPD of the LCS and LCSD exceeds the control limits

Metals

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

General Chemistry

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.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

TestAmerica Chicago

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Laboratory: TestAmerica Chicago

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

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

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

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

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name: <u>PT-80 WILL COUNTY</u>	COC No.: _____ of _____
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>PTB184-006/AG-7-06A</u>	Lab Job No.: <u>500-146443</u>
		TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>7(B)</u>	Sample Temp: <u>1.2 → 2.7</u> <u>0.8 → 2.3, 4.1, 3.6</u>
		Sampler:	Matrix Key: <u>2, 3, 3</u>

Special Instructions:
See Table 2 for complete parameter lists and minimum reporting limits.
* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
*** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES													Waste Characterization	Comments
VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids				

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		
12	1628V2-1-B64-2	6/4	1230	3	X	X					X	X	X	X	X			TB 19
13	1628V2-1-B65-1	↓	1240	↓	↓	↓					↓	↓	↓	↓	↓			↓
14	1628V2-1-B66-1	↓	1250	↓	↓	↓					↓	↓	↓	↓	↓			↓
15	1628V2-1-B67-1	↓	1300	↓	↓	↓					↓	↓	↓	↓	↓			↓
16	1628V2-1-B67-2	↓	1310	↓	↓	↓					↓	↓	↓	↓	↓			↓
	1628V2-1-B			↓	↓	↓					↓	↓	↓	↓	↓			
	1628V2-1-B			↓	↓	↓					↓	↓	↓	↓	↓			
	1628V2-1-B			↓	↓	↓					↓	↓	↓	↓	↓			
	1628V2-1-B			↓	↓	↓					↓	↓	↓	↓	↓			
	1628V2-1-B			↓	↓	↓					↓	↓	↓	↓	↓			
	1628V2-1-B			↓	↓	↓					↓	↓	↓	↓	↓			

Relinquished by: <u>[Signature]</u>	Date/Time: <u>6/5/18 1240</u>	Received by: <u>[Signature]</u>	Date/Time: <u>6/5/18-1240</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>1400</u>	Received by: <u>[Signature]</u>	Date/Time: <u>1400</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

CHAIN OF CUSTODY RECORD







Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>I-40 Will County</u> Project No.: <u>PTB 184-DOL/AE7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> 7BD Other Sampler: <u>ESP/CRM</u>	COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>500-146443</u> Sample Temp: <u>1.2-2.1</u> <u>0.8-2.3, 4.1, 3.6</u> Matrix Key: <u>2.2, 3.3</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds ^{MAC} Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES														W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other			
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide		pH	% Solids	Waste Characterization

17	1628V2-32-B12	6/4	850	S	X	X					X	X	X	X	X		6-4 TB15
18	1628V2-32-B11-1		915														0-8 TB15
19	1628V2-32-B11-2		920														8-16 TB15
20	1628V2-32-B10-1		940														0-8 TB15
21	1628V2-32-B10-2		945														8-16 TB15
22	1628V2-1-C31		1405	W	X	X					X		X	X			TB20
23	1628V2-1-C08		1425	W	X	X					X		X	X			TB20
24	TRIP BLANK 18			W	X												
25	TRIP BLANK 18			S	X												
26	TRIP BLANK 19			S	X												

Relinquished by: 	Date/Time: <u>6-5-18 1240</u>	Received by:  TA	Date/Time: <u>6/5/18 1400</u>
Relinquished by:  TA	Date/Time: <u>6/5/18 1400</u>	Received by:  TA-OUT	Date/Time: <u>6/5/18 1400</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:



Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

1350 West Maple Street

City: New Lenox State: IL Zip Code: 60451

County: Will Township: New Lenox

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

Latitude: 41.51768 Longitude: -87.99224

(Decimal Degrees)

(-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: 1970705023 BOW: _____ BOA: _____

Additional BOL: 1970705009, 1970705114

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

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

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

Contact: Kristine A. Kutscher

Contact: Kristine A. Kutscher

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

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.51768 Longitude: -87.99224

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATION 1628V2-1-B57 WAS SAMPLED ADJACENT TO SITE 1628V2-23 SEE TABLE 3a AND FIGURE 10 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

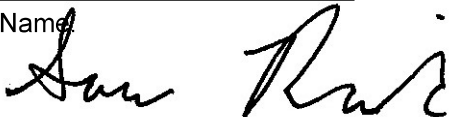
TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-146443-1

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

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

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

Company Name: Andrews Engineering, Inc.
 Street Address: 420 Eisenhower Lane North
 City: Lombard State: IL Zip Code: 60148
 Phone: 630-953-3332

Savo Radulovic
 Printed Name

 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

July 16, 2018
 Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-23
IDOT New Lenox Maintenance Facility and Sign Shop

Sample ID	1628V2-1-B57	Maximum Allowable Concentration				
Sample Depth (ft)	0-1	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area
Sample Date	6/4/2018					
PID	0					
Sample pH	8.9					
Matrix	Soil					
No Contaminants of Concern Noted.						

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: 500-146443-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/18/2018 1:48:40 PM

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

LINKS

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results through
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www.testamericainc.com

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

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

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

1

2

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00094	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1-Dichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00077	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
2-Butanone (MEK)	<0.0055		0.0055	0.0024	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Acetone	0.032		0.022	0.0095	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Benzene	<0.0022		0.0022	0.00056	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Bromoform	<0.0022		0.0022	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Carbon disulfide	<0.0055		0.0055	0.0011	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chlorobenzene	<0.0022		0.0022	0.00081	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chloroethane	<0.0055		0.0055	0.0016	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chloroform	<0.0022		0.0022	0.00076	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Dibromochloromethane	<0.0022		0.0022	0.00072	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Methylene Chloride	<0.0055		0.0055	0.0022	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Tetrachloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00097	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00077	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Trichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Vinyl chloride	<0.0022		0.0022	0.00097	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1
Xylenes, Total	<0.0044		0.0044	0.00070	mg/Kg	☼	06/05/18 15:57	06/12/18 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		70 - 134	06/05/18 15:57	06/12/18 16:40	1
4-Bromofluorobenzene (Surr)	103		75 - 131	06/05/18 15:57	06/12/18 16:40	1
Dibromofluoromethane	109		75 - 126	06/05/18 15:57	06/12/18 16:40	1
Toluene-d8 (Surr)	110		75 - 124	06/05/18 15:57	06/12/18 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Methylnaphthalene	<0.070		0.070	0.0063	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
2-Nitrophenol	<0.34		0.34	0.081	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Anthracene	<0.034		0.034	0.0058	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[a]anthracene	0.022	J	0.034	0.0046	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[a]pyrene	0.034		0.034	0.0067	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[b]fluoranthene	0.054		0.034	0.0074	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Benzo[k]fluoranthene	0.013	J	0.034	0.010	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Carbazole	<0.17		0.17	0.086	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Chrysene	0.032	J	0.034	0.0094	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Fluoranthene	0.038		0.034	0.0064	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.024	J	0.034	0.0089	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Pentachlorophenol	<0.70		0.70	0.55	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Phenanthrene	0.013	J	0.034	0.0048	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Pyrene	0.039		0.034	0.0069	mg/Kg	☼	06/08/18 18:19	06/14/18 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		25 - 139				06/08/18 18:19	06/14/18 13:49	1
2-Fluorobiphenyl	93		44 - 121				06/08/18 18:19	06/14/18 13:49	1
2-Fluorophenol	115		46 - 133				06/08/18 18:19	06/14/18 13:49	1
Nitrobenzene-d5	89		41 - 120				06/08/18 18:19	06/14/18 13:49	1
Phenol-d5	112		46 - 125				06/08/18 18:19	06/14/18 13:49	1
Terphenyl-d14	102		35 - 160				06/08/18 18:19	06/14/18 13:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Arsenic	1.7		0.52	0.18	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Barium	12		0.52	0.059	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Beryllium	0.22		0.21	0.048	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Boron	16		2.6	0.24	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Cadmium	0.14	B	0.10	0.019	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Calcium	200000	B	100	18	mg/Kg	☼	06/07/18 17:02	06/12/18 00:35	10
Chromium	7.3		0.52	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Cobalt	1.8		0.26	0.068	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Copper	5.5		0.52	0.14	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Iron	4700		10	5.4	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Lead	18		0.26	0.12	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Magnesium	120000	B	52	26	mg/Kg	☼	06/07/18 17:02	06/12/18 00:35	10
Manganese	290	B	0.52	0.075	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Nickel	3.9		0.52	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Potassium	1100		26	9.1	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Selenium	<0.52		0.52	0.30	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Sodium	1700		52	7.6	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Vanadium	7.2		0.26	0.061	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1
Zinc	25		1.0	0.45	mg/Kg	☼	06/07/18 17:02	06/08/18 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Barium	<0.50		0.50	0.050	mg/L		06/12/18 07:22	06/12/18 17:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 17:05	1
Boron	<0.10		0.10	0.050	mg/L		06/12/18 07:22	06/12/18 17:05	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-1

Client Sample ID: 1628V2-1-B57

Lab Sample ID: 500-146443-7

Date Collected: 06/04/18 12:15

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 17:05	1
Calcium	5.4		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:05	1
Chromium	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Cobalt	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Iron	0.29	J	0.40	0.20	mg/L		06/12/18 07:22	06/12/18 17:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 17:05	1
Manganese	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Nickel	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Potassium	0.86	J	2.5	0.50	mg/L		06/12/18 07:22	06/12/18 17:05	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 17:05	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 17:05	1
Zinc	<0.50		0.50	0.020	mg/L		06/12/18 07:22	06/12/18 17:05	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:21	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 10:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	B	0.017	0.0057	mg/Kg	☼	06/08/18 16:15	06/11/18 17:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	06/14/18 20:00	06/15/18 14:15	1
pH	8.9		0.20	0.20	SU			06/11/18 16:52	1



Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

475 Nelson Road

City: New Lenox State: IL Zip Code: 60451

County: Will Township: New Lenox

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

Latitude: 41.51915 Longitude: -87.98732

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: 1970705122 BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.51915 Longitude: -87.98732

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATION 1628V2-27-B03 WAS SAMPLED ADJACENT TO SITE 1628V2-27 SEE TABLE 3d AND FIGURES 16 AND 17 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

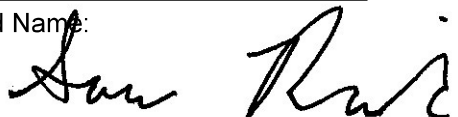
TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBERS: 500-146242-3.

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

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

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

Company Name: Andrews Engineering, Inc.
 Street Address: 420 Eisenhower Lane North
 City: Lombard State: IL Zip Code: 60148
 Phone: 630-953-3332

Savo Radulovic
 Printed Name:

 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

July 16, 2018
 Date:



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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-27

Jewel Osco

Sample ID	1628V2-27-B03	Maximum Allowable Concentration				
Sample Depth (ft)	0-5					
Sample Date	5/31/2018					
PID	0					
Sample pH	8.7					
Matrix	Soil	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area
No Contaminants of Concern Noted.						

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: 500-146242-3
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/12/2018 4:49:41 PM

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

LINKS

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www.testamericainc.com

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

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

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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-3

Client Sample ID: 1628V2-27-B03

Lab Sample ID: 500-146242-9

Date Collected: 05/31/18 14:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Acetone	0.018		0.016	0.0069	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/31/18 18:29	06/11/18 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		70 - 134	05/31/18 18:29	06/11/18 12:55	1
4-Bromofluorobenzene (Surr)	99		75 - 131	05/31/18 18:29	06/11/18 12:55	1
Dibromofluoromethane	116		75 - 126	05/31/18 18:29	06/11/18 12:55	1
Toluene-d8 (Surr)	112		75 - 124	05/31/18 18:29	06/11/18 12:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-3

Client Sample ID: 1628V2-27-B03

Lab Sample ID: 500-146242-9

Date Collected: 05/31/18 14:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-3

Client Sample ID: 1628V2-27-B03

Lab Sample ID: 500-146242-9

Date Collected: 05/31/18 14:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0095	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	06/04/18 18:51	06/06/18 16:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		25 - 139				06/04/18 18:51	06/06/18 16:07	1
2-Fluorobiphenyl	84		44 - 121				06/04/18 18:51	06/06/18 16:07	1
2-Fluorophenol	125		46 - 133				06/04/18 18:51	06/06/18 16:07	1
Nitrobenzene-d5	84		41 - 120				06/04/18 18:51	06/06/18 16:07	1
Phenol-d5	124		46 - 125				06/04/18 18:51	06/06/18 16:07	1
Terphenyl-d14	107		35 - 160				06/04/18 18:51	06/06/18 16:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Arsenic	8.0		0.58	0.20	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Barium	36		0.58	0.066	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Beryllium	0.80		0.23	0.054	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Boron	17		2.9	0.27	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Cadmium	0.30	B	0.12	0.021	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Calcium	53000	B	58	9.8	mg/Kg	☼	06/01/18 07:27	06/05/18 02:04	5
Chromium	18		0.58	0.29	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Cobalt	11		0.29	0.076	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Copper	26		0.58	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Iron	21000		12	6.0	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Lead	15		0.29	0.13	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Magnesium	21000		5.8	2.9	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Manganese	340		0.58	0.084	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Nickel	30		0.58	0.17	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Potassium	3200		29	10	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Silver	0.16	J	0.29	0.075	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Sodium	2100		58	8.6	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Vanadium	23		0.29	0.068	mg/Kg	☼	06/01/18 07:27	06/01/18 21:09	1
Zinc	74	B	5.8	2.5	mg/Kg	☼	06/01/18 07:27	06/05/18 02:04	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 01:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 01:48	1
Manganese	0.59		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 01:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-3

Client Sample ID: 1628V2-27-B03

Lab Sample ID: 500-146242-9

Date Collected: 05/31/18 14:45

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.030	J	0.050	0.010	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Barium	0.19	J	0.50	0.050	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Boron	0.067	J	0.10	0.050	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Calcium	18		2.5	0.50	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Chromium	0.058		0.025	0.010	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Cobalt	0.019	J	0.025	0.010	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Iron	82		0.40	0.20	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Lead	0.027		0.0075	0.0075	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Manganese	0.43		0.025	0.010	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Nickel	0.086		0.025	0.010	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Potassium	11		2.5	0.50	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Selenium	<0.050		0.050	0.020	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Silver	<0.025		0.025	0.010	mg/L	-	06/05/18 07:05	06/05/18 21:36	1
Zinc	0.25	J	0.50	0.020	mg/L	-	06/05/18 07:05	06/05/18 21:36	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	06/05/18 07:05	06/05/18 17:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	06/05/18 07:05	06/05/18 17:45	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	06/05/18 13:15	06/06/18 10:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.019	0.0063	mg/Kg	☼	06/01/18 16:30	06/04/18 11:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.17	mg/Kg	☼	06/11/18 11:05	06/11/18 15:50	1
pH	8.7		0.20	0.20	SU			06/07/18 13:19	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-3

Qualifiers

GC/MS VOA

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

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-3

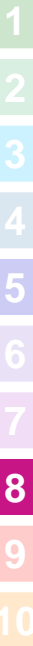
Laboratory: TestAmerica Chicago

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

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

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

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





Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

471 Nelson Road

City: New Lenox State: IL Zip Code: 60451

County: Will Township: New Lenox

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

Latitude: 41.51898 Longitude: -87.98627

(Decimal Degrees)

(-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: 1970705077 BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.51898 Longitude: -87.98627

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATION 1628V2-28-B01 WAS SAMPLED ADJACENT TO SITE 1628V2-28 SEE TABLE 3e AND FIGURE 17 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBERS: 500-146242-4.

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

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

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

Company Name: Andrews Engineering, Inc.
 Street Address: 420 Eisenhower Lane North
 City: Lombard State: IL Zip Code: 60148
 Phone: 630-953-3332

Savo Radulovic
 Printed Name:

 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

July 16, 2018
 Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-28

Circle K Gasoline Station

Sample ID	1628V2-28-B01	Maximum Allowable Concentration				
Sample Depth (ft)	0-5					
Sample Date	5/31/2018					
PID	0	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area
Sample pH	8.3					
Matrix	Soil					
No Contaminants of Concern Noted.						

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: 500-146242-4
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/12/2018 4:52:09 PM

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

LINKS

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www.testamericainc.com

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

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

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

1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-4

Client Sample ID: 1628V2-28-B01

Lab Sample ID: 500-146242-10

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Acetone	0.015	J	0.016	0.0070	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/31/18 18:29	06/11/18 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 134	05/31/18 18:29	06/11/18 13:22	1
4-Bromofluorobenzene (Surr)	92		75 - 131	05/31/18 18:29	06/11/18 13:22	1
Dibromofluoromethane	107		75 - 126	05/31/18 18:29	06/11/18 13:22	1
Toluene-d8 (Surr)	110		75 - 124	05/31/18 18:29	06/11/18 13:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-4

Client Sample ID: 1628V2-28-B01

Lab Sample ID: 500-146242-10

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-4

Client Sample ID: 1628V2-28-B01

Lab Sample ID: 500-146242-10

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	06/04/18 18:51	06/06/18 14:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		25 - 139				06/04/18 18:51	06/06/18 14:52	1
2-Fluorobiphenyl	96		44 - 121				06/04/18 18:51	06/06/18 14:52	1
2-Fluorophenol	112		46 - 133				06/04/18 18:51	06/06/18 14:52	1
Nitrobenzene-d5	86		41 - 120				06/04/18 18:51	06/06/18 14:52	1
Phenol-d5	101		46 - 125				06/04/18 18:51	06/06/18 14:52	1
Terphenyl-d14	119		35 - 160				06/04/18 18:51	06/06/18 14:52	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Arsenic	11		0.58	0.20	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Barium	49		0.58	0.066	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Beryllium	0.95		0.23	0.054	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Boron	14		2.9	0.27	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Cadmium	0.38	B	0.12	0.021	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Calcium	13000	B	12	2.0	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Chromium	59		0.58	0.29	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Cobalt	15		0.29	0.076	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Copper	33		0.58	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Iron	37000		12	6.1	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Lead	19		0.29	0.13	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Magnesium	10000		5.8	2.9	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Manganese	580		0.58	0.085	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Nickel	41		0.58	0.17	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Potassium	2800		29	10	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Selenium	0.75		0.58	0.34	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Silver	0.21	J	0.29	0.075	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Sodium	2500		58	8.6	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Vanadium	25		0.29	0.069	mg/Kg	☼	06/01/18 07:27	06/01/18 21:13	1
Zinc	75	B	1.2	0.51	mg/Kg	☼	06/01/18 07:27	06/05/18 02:08	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 01:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 01:52	1
Manganese	0.74		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 01:52	1
Nickel	0.013	J	0.025	0.010	mg/L		06/05/18 07:11	06/06/18 01:52	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-4

Client Sample ID: 1628V2-28-B01

Lab Sample ID: 500-146242-10

Date Collected: 05/31/18 15:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.048	J	0.050	0.010	mg/L		06/05/18 07:05	06/05/18 21:40	1
Barium	0.33	J	0.50	0.050	mg/L		06/05/18 07:05	06/05/18 21:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 07:05	06/05/18 21:40	1
Boron	0.081	J	0.10	0.050	mg/L		06/05/18 07:05	06/05/18 21:40	1
Cadmium	0.0030	J	0.0050	0.0020	mg/L		06/05/18 07:05	06/05/18 21:40	1
Calcium	13		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 21:40	1
Chromium	0.083		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:40	1
Cobalt	0.035		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:40	1
Iron	120		0.40	0.20	mg/L		06/05/18 07:05	06/05/18 21:40	1
Lead	0.041		0.0075	0.0075	mg/L		06/05/18 07:05	06/05/18 21:40	1
Manganese	0.92		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:40	1
Nickel	0.14		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:40	1
Potassium	14		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 21:40	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 07:05	06/05/18 21:40	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:40	1
Zinc	0.38	J	0.50	0.020	mg/L		06/05/18 07:05	06/05/18 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 07:11	06/06/18 19:24	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 07:05	06/05/18 17:49	1
Thallium	0.0029		0.0020	0.0020	mg/L		06/05/18 07:05	06/05/18 17:49	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00033		0.00020	0.00020	mg/L		06/05/18 13:15	06/06/18 10:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.018	0.0059	mg/Kg	☼	06/01/18 16:30	06/04/18 11:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.17	mg/Kg	☼	06/11/18 11:05	06/11/18 15:50	1
pH	8.3		0.20	0.20	SU			06/07/18 13:23	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-4

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-4

Laboratory: TestAmerica Chicago

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

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

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

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



Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

1500 West Lincoln Highway

City: New Lenox State: IL Zip Code: 60451

County: Will Township: New Lenox

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

Latitude: 41.52073 Longitude: -87.99681

(Decimal Degrees)

(-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: 1970705021 BOW: _____ BOA: _____

Additional BOL: 1970705038, 1970705106

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

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

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

Contact: Kristine A. Kutscher

Contact: Kristine A. Kutscher

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

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.52073 Longitude: -87.99681

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATION 1628V2-29-B01 WAS SAMPLED ADJACENT TO SITE 1628V2-29 SEE TABLE 3f AND FIGURE 12 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

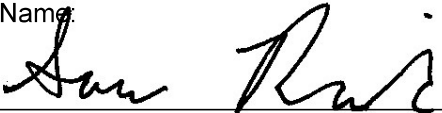
TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-146242-5.

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

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

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

Company Name: Andrews Engineering, Inc.
 Street Address: 420 Eisenhower Lane North
 City: Lombard State: IL Zip Code: 60148
 Phone: 630-953-3332

Savo Radulovic
 Printed Name:

 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

July 16, 2018
 Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-29

Kmart

Sample ID	1628V2-29-B01	Maximum Allowable Concentration					
Sample Depth (ft)	0-2						
Sample Date	5/31/2018						
PID	0						
Sample pH	7.7						
Matrix	Soil	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area	
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.23	1.2	0.09	0.09	0.98	1.3	2.1

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: 500-146242-5
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/12/2018 4:53:07 PM

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

LINKS

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results through
TotalAccess

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www.testamericainc.com

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

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

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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-5

Client Sample ID: 1628V2-29-B01

Lab Sample ID: 500-146242-11

Date Collected: 05/31/18 09:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Acetone	0.010	J	0.016	0.0071	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 134	05/31/18 18:29	06/11/18 13:50	1
4-Bromofluorobenzene (Surr)	106		75 - 131	05/31/18 18:29	06/11/18 13:50	1
Dibromofluoromethane	112		75 - 126	05/31/18 18:29	06/11/18 13:50	1
Toluene-d8 (Surr)	112		75 - 124	05/31/18 18:29	06/11/18 13:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-5

Client Sample ID: 1628V2-29-B01

Lab Sample ID: 500-146242-11

Date Collected: 05/31/18 09:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2-Methylnaphthalene	<0.072		0.072	0.0065	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Acenaphthene	0.0085	J	0.035	0.0064	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Acenaphthylene	0.0059	J	0.035	0.0047	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Anthracene	0.026	J	0.035	0.0059	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Benzo[a]anthracene	0.20		0.035	0.0048	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Benzo[a]pyrene	0.23		0.035	0.0069	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Benzo[b]fluoranthene	0.35		0.035	0.0077	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Benzo[g,h,i]perylene	0.11		0.035	0.011	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Benzo[k]fluoranthene	0.12		0.035	0.010	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Chrysene	0.26		0.035	0.0097	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Dibenz(a,h)anthracene	0.025	J	0.035	0.0069	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Fluoranthene	0.45		0.035	0.0066	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Fluorene	0.0062	J	0.035	0.0050	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Hexachlorobenzene	<0.072		0.072	0.0082	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-5

Client Sample ID: 1628V2-29-B01

Lab Sample ID: 500-146242-11

Date Collected: 05/31/18 09:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.10		0.035	0.0092	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Phenanthrene	0.15		0.035	0.0050	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Pyrene	0.38		0.035	0.0071	mg/Kg	☼	06/04/18 18:51	06/06/18 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		25 - 139				06/04/18 18:51	06/06/18 17:11	1
2-Fluorobiphenyl	94		44 - 121				06/04/18 18:51	06/06/18 17:11	1
2-Fluorophenol	108		46 - 133				06/04/18 18:51	06/06/18 17:11	1
Nitrobenzene-d5	86		41 - 120				06/04/18 18:51	06/06/18 17:11	1
Phenol-d5	96		46 - 125				06/04/18 18:51	06/06/18 17:11	1
Terphenyl-d14	109		35 - 160				06/04/18 18:51	06/06/18 17:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Arsenic	7.4		0.55	0.19	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Barium	81		0.55	0.063	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Beryllium	0.59		0.22	0.051	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Boron	7.8		2.7	0.26	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Cadmium	0.33	B	0.11	0.020	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Calcium	32000	B	11	1.9	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Chromium	13		0.55	0.27	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Cobalt	8.4		0.27	0.072	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Copper	15		0.55	0.15	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Iron	16000		11	5.7	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Lead	26		0.27	0.13	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Magnesium	19000		5.5	2.7	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Manganese	580		0.55	0.080	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Nickel	16		0.55	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Potassium	1400		27	9.7	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Silver	0.13	J	0.27	0.071	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Sodium	200		55	8.1	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Vanadium	22		0.27	0.065	mg/Kg	☼	06/01/18 07:27	06/01/18 21:17	1
Zinc	64	B	1.1	0.48	mg/Kg	☼	06/01/18 07:27	06/05/18 02:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 01:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 01:56	1
Manganese	0.54		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 01:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-5

Client Sample ID: 1628V2-29-B01

Lab Sample ID: 500-146242-11

Date Collected: 05/31/18 09:35

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 07:05	06/05/18 21:44	1
Barium	0.19	J	0.50	0.050	mg/L		06/05/18 07:05	06/05/18 21:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 07:05	06/05/18 21:44	1
Boron	0.056	J	0.10	0.050	mg/L		06/05/18 07:05	06/05/18 21:44	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 07:05	06/05/18 21:44	1
Calcium	12		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 21:44	1
Chromium	0.038		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:44	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:44	1
Iron	33		0.40	0.20	mg/L		06/05/18 07:05	06/05/18 21:44	1
Lead	0.014		0.0075	0.0075	mg/L		06/05/18 07:05	06/05/18 21:44	1
Manganese	0.50		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:44	1
Nickel	0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:44	1
Potassium	6.5		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 21:44	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 07:05	06/05/18 21:44	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 21:44	1
Zinc	0.16	J	0.50	0.020	mg/L		06/05/18 07:05	06/05/18 21:44	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 07:05	06/05/18 17:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 07:05	06/05/18 17:53	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/05/18 13:15	06/06/18 10:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.018	0.0059	mg/Kg	☼	06/01/18 16:30	06/04/18 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	06/11/18 11:05	06/11/18 15:50	1
pH	7.7		0.20	0.20	SU			06/07/18 13:28	1



Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

1490 West Lincoln Highway

City: New Lenox State: IL Zip Code: 60451

County: Will Township: New Lenox

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

Latitude: 41.52046 Longitude: -87.99547

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.52046 Longitude: -87.99547

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATIONS 1628V2-31-B03 AND -B04 WERE SAMPLED ADJACENT TO SITE 1628V2-31 SEE TABLE 3g AND FIGURES 12 AND 13 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

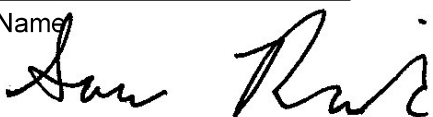
TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBERS: 500-146242-6 AND 500-146314-1.

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

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

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

Company Name: Andrews Engineering, Inc.
 Street Address: 420 Eisenhower Lane North
 City: Lombard State: IL Zip Code: 60148
 Phone: 630-953-3332

Savo Radulovic
 Printed Name

 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

July 16, 2018
 Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-31

Williamson's Restaurant & Bar

Sample ID	1628V2-31-B03	1628V2-31-B04	Maximum Allowable Concentration						
Sample Depth (ft)	0-5	0-5	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area		
Sample Date	5/31/2018	6/1/2018							
PID	0	0							
Sample pH	8.1	8.3							
Matrix	Soil	Soil							
Semivolatile Organic Compounds (mg/kg)									
Benzo(a)pyrene	0.1	1,2	0.039		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)									
Arsenic	9.1		13	1,3	11.3	--	11.3	--	13

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: 500-146242-6
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/12/2018 4:54:09 PM

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

LINKS

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www.testamericainc.com

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

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

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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-6

Client Sample ID: 1628V2-31-B03

Lab Sample ID: 500-146242-15

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
2-Butanone (MEK)	0.0042	J	0.0044	0.0020	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Acetone	0.028		0.018	0.0077	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Methylene Chloride	<0.0044		0.0044	0.0018	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		70 - 134	05/31/18 18:29	06/11/18 15:41	1
4-Bromofluorobenzene (Surr)	105		75 - 131	05/31/18 18:29	06/11/18 15:41	1
Dibromofluoromethane	112		75 - 126	05/31/18 18:29	06/11/18 15:41	1
Toluene-d8 (Surr)	108		75 - 124	05/31/18 18:29	06/11/18 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-6

Client Sample ID: 1628V2-31-B03

Lab Sample ID: 500-146242-15

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2-Methylnaphthalene	0.011	J	0.080	0.0073	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Acenaphthylene	0.020	J	0.039	0.0052	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Anthracene	0.018	J	0.039	0.0066	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Benzo[a]anthracene	0.077		0.039	0.0053	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Benzo[a]pyrene	0.10		0.039	0.0077	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Benzo[b]fluoranthene	0.17		0.039	0.0085	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Benzo[g,h,i]perylene	0.061		0.039	0.013	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Benzo[k]fluoranthene	0.066		0.039	0.012	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Chrysene	0.11		0.039	0.011	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Fluoranthene	0.14		0.039	0.0073	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-6

Client Sample ID: 1628V2-31-B03

Lab Sample ID: 500-146242-15

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.071		0.039	0.010	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Naphthalene	0.0079	J	0.039	0.0061	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Phenanthrene	0.056		0.039	0.0055	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Pyrene	0.15		0.039	0.0079	mg/Kg	☼	06/04/18 18:51	06/06/18 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	94		25 - 139				06/04/18 18:51	06/06/18 18:34	1
2-Fluorobiphenyl	92		44 - 121				06/04/18 18:51	06/06/18 18:34	1
2-Fluorophenol	107		46 - 133				06/04/18 18:51	06/06/18 18:34	1
Nitrobenzene-d5	83		41 - 120				06/04/18 18:51	06/06/18 18:34	1
Phenol-d5	95		46 - 125				06/04/18 18:51	06/06/18 18:34	1
Terphenyl-d14	127		35 - 160				06/04/18 18:51	06/06/18 18:34	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	☼	06/01/18 07:27	06/01/18 21:34	1
Arsenic	9.1		0.57	0.20	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Barium	76		0.57	0.065	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Beryllium	0.70		0.23	0.054	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Boron	11		2.9	0.27	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Cadmium	0.53	B	0.11	0.021	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Calcium	50000	B	57	9.7	mg/Kg	☼	06/01/18 07:27	06/05/18 02:36	5
Chromium	14		0.57	0.28	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Cobalt	9.3		0.29	0.075	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Copper	20		0.57	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Iron	19000		11	6.0	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Lead	130		0.29	0.13	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Magnesium	23000		5.7	2.8	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Manganese	610		0.57	0.083	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Nickel	20		0.57	0.17	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Potassium	1800		29	10	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Selenium	0.39	J	0.57	0.34	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Silver	0.15	J	0.29	0.074	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Sodium	570		57	8.5	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Vanadium	23		0.29	0.068	mg/Kg	☼	06/01/18 07:27	06/01/18 21:34	1
Zinc	91	B	5.7	2.5	mg/Kg	☼	06/01/18 07:27	06/05/18 02:36	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 02:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 02:12	1
Manganese	0.27		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 02:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-6

Client Sample ID: 1628V2-31-B03

Lab Sample ID: 500-146242-15

Date Collected: 05/31/18 10:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	J	0.050	0.010	mg/L		06/05/18 07:05	06/05/18 22:12	1
Barium	0.31	J	0.50	0.050	mg/L		06/05/18 07:05	06/05/18 22:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 07:05	06/05/18 22:12	1
Boron	0.11		0.10	0.050	mg/L		06/05/18 07:05	06/05/18 22:12	1
Cadmium	0.0029	J	0.0050	0.0020	mg/L		06/05/18 07:05	06/05/18 22:12	1
Calcium	19		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:12	1
Chromium	0.072		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:12	1
Cobalt	0.017	J	0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:12	1
Iron	69		0.40	0.20	mg/L		06/05/18 07:05	06/05/18 22:12	1
Lead	0.19		0.0075	0.0075	mg/L		06/05/18 07:05	06/05/18 22:12	1
Manganese	0.53		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:12	1
Nickel	0.060		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:12	1
Potassium	15		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:12	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 07:05	06/05/18 22:12	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:12	1
Zinc	0.26	J	0.50	0.020	mg/L		06/05/18 07:05	06/05/18 22:12	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 07:05	06/05/18 18:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 07:05	06/05/18 18:10	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/05/18 13:15	06/06/18 11:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.018	0.0061	mg/Kg	☼	06/01/18 16:30	06/04/18 11:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	06/11/18 11:05	06/11/18 15:52	1
pH	8.1		0.20	0.20	SU			06/07/18 13:47	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-6

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

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

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-6

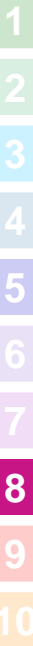
Laboratory: TestAmerica Chicago

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

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

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

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



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Chicago
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Tel: (708)534-5200

TestAmerica Job ID: 500-146314-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
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Attn: Ms. Colleen Grey



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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-1

Client Sample ID: 1628V2-31-B04

Lab Sample ID: 500-146314-1

Date Collected: 06/01/18 00:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Acetone	0.024		0.019	0.0083	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Bromomethane	<0.0047	*	0.0047	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	06/01/18 17:41	06/07/18 15:42	1
4-Bromofluorobenzene (Surr)	111		75 - 131	06/01/18 17:41	06/07/18 15:42	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/07/18 15:42	1
Toluene-d8 (Surr)	97		75 - 124	06/01/18 17:41	06/07/18 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-1

Client Sample ID: 1628V2-31-B04

Lab Sample ID: 500-146314-1

Date Collected: 06/01/18 00:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Acenaphthylene	0.0072	J	0.038	0.0050	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Anthracene	0.0067	J	0.038	0.0063	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Benzo[a]anthracene	0.030	J	0.038	0.0051	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Benzo[a]pyrene	0.039		0.038	0.0073	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Benzo[b]fluoranthene	0.052		0.038	0.0082	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Benzo[g,h,i]perylene	0.022	J	0.038	0.012	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Benzo[k]fluoranthene	0.016	J	0.038	0.011	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Carbazole	0.12	J	0.19	0.094	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Chrysene	0.036	J	0.038	0.010	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Fluoranthene	0.051		0.038	0.0070	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-1

Client Sample ID: 1628V2-31-B04

Lab Sample ID: 500-146314-1

Date Collected: 06/01/18 00:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.021	J	0.038	0.0098	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Phenanthrene	0.019	J	0.038	0.0053	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Pyrene	0.048		0.038	0.0075	mg/Kg	☼	06/05/18 07:32	06/08/18 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		25 - 139				06/05/18 07:32	06/08/18 15:26	1
2-Fluorobiphenyl	90		44 - 121				06/05/18 07:32	06/08/18 15:26	1
2-Fluorophenol	111		46 - 133				06/05/18 07:32	06/08/18 15:26	1
Nitrobenzene-d5	83		41 - 120				06/05/18 07:32	06/08/18 15:26	1
Phenol-d5	106		46 - 125				06/05/18 07:32	06/08/18 15:26	1
Terphenyl-d14	110		35 - 160				06/05/18 07:32	06/08/18 15:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2	F1	1.2	0.23	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Arsenic	13	F1	0.58	0.20	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Barium	44		0.58	0.066	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Beryllium	0.62		0.23	0.054	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Boron	6.1	B	2.9	0.27	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Cadmium	0.45	B	0.12	0.021	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Calcium	73000	B	120	20	mg/Kg	☼	06/05/18 17:44	06/07/18 12:08	10
Chromium	11	F1	0.58	0.29	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Cobalt	8.0		0.29	0.076	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Copper	18		0.58	0.16	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Iron	24000		12	6.0	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Lead	42		0.29	0.13	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Magnesium	29000		5.8	2.9	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Manganese	400		0.58	0.084	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Nickel	19	F1	0.58	0.17	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Potassium	1200	F1	29	10	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Selenium	0.78	F1	0.58	0.34	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Silver	0.16	J	0.29	0.075	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Sodium	750		58	8.6	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Vanadium	17		0.29	0.068	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1
Zinc	75	F1	1.2	0.51	mg/Kg	☼	06/05/18 17:44	06/07/18 00:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:17	06/08/18 12:24	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:24	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:17	06/08/18 12:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:17	06/08/18 12:24	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-1

Client Sample ID: 1628V2-31-B04

Lab Sample ID: 500-146314-1

Date Collected: 06/01/18 00:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.21		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:24	1
Nickel	<0.025		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.030	J	0.050	0.010	mg/L		06/07/18 15:13	06/08/18 10:44	1
Barium	0.40	J	0.50	0.050	mg/L		06/07/18 15:13	06/08/18 10:44	1
Beryllium	0.0058		0.0040	0.0040	mg/L		06/07/18 15:13	06/08/18 10:44	1
Boron	0.19		0.10	0.050	mg/L		06/07/18 15:13	06/08/18 10:44	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		06/07/18 15:13	06/08/18 10:44	1
Calcium	21		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:44	1
Chromium	0.13		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:44	1
Cobalt	0.029		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:44	1
Iron	120		0.40	0.20	mg/L		06/07/18 15:13	06/08/18 10:44	1
Lead	0.14		0.0075	0.0075	mg/L		06/07/18 15:13	06/08/18 10:44	1
Manganese	0.70		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:44	1
Nickel	0.11		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:44	1
Potassium	35		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:44	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:13	06/08/18 10:44	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:44	1
Zinc	0.44	J	0.50	0.020	mg/L		06/07/18 15:13	06/08/18 10:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:17	06/11/18 11:50	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:13	06/08/18 18:26	1
Thallium	0.0031		0.0020	0.0020	mg/L		06/07/18 15:13	06/08/18 18:26	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00024		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 09:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.086		0.018	0.0062	mg/Kg	☼	06/05/18 15:30	06/06/18 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	06/13/18 13:10	06/13/18 16:11	1
pH	8.3		0.20	0.20	SU			06/08/18 15:56	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-1

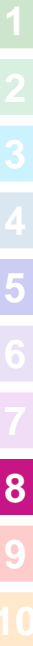
Laboratory: TestAmerica Chicago

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

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

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

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





Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

800-1600 blocks of West Lincoln Highway (Northeast side of US Route 30 South of Hickory Creek)

City: New Lenox State: IL Zip Code: 60432 and 60451

County: Will Township: New Lenox

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

Latitude: 41.52026 Longitude: -87.99098

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.52026 Longitude: -87.99098

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATIONS 1628V2-32-B01 THROUGH -B04, -B09, -B12 THROUGH -B14, AND -B16 THROUGH -B20 WERE SAMPLED ADJACENT TO SITE 1628V2-32 SEE TABLE 3h AND FIGURE 12 THROUGH 17 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBERS: 500-146314-2, 500-146315-1, AND 500-146443-2.

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

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

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

Company Name: Andrews Engineering, Inc.
 Street Address: 420 Eisenhower Lane North
 City: Lombard State: IL Zip Code: 60148
 Phone: 630-953-3332

Savo Radulovic
 Printed Name:

 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

July 16, 2018
 Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-32

Metra Railroad

Sample ID	1628V2-32-B01	1628V2-32-B02	1628V2-32-B03	1628V2-32-B04	1628V2-32-B09	Maximum Allowable Concentration					
Sample Depth (ft)	0-5	0-3	0-2.5	0-4	0-4	¹ Most Stringent ² Outside a Populated Area ³ Within a Populated non-Metropolitan Statistical Area ⁴ Within Chicago Corporate Limits ⁵ Within a Metropolitan Statistical Area					
Sample Date	6/1/2018	6/1/2018	6/1/2018	6/1/2018	6/1/2018						
PID	0	0	0	0	0						
Sample pH	8.1	8.9	8.5	8.5	7.8						
Matrix	Soil	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.											

Sample ID	1628V2-32-B12	1628V2-32-B13	1628V2-32-B13 DUP	1628V2-32-B14-1	1628V2-32-B16	Maximum Allowable Concentration					
Sample Depth (ft)	0-4	0-3.5	0-3.5	0-1.5	0-5	¹ Most Stringent ² Outside a Populated Area ³ Within a Populated non-Metropolitan Statistical Area ⁴ Within Chicago Corporate Limits ⁵ Within a Metropolitan Statistical Area					
Sample Date	6/4/2018	6/1/2018	6/1/2018	6/1/2018	6/1/2018						
PID	0	0	0	0	0						
Sample pH	8.7	8.5	8.9	8.9	8.4						
Matrix	Soil	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	ND	J 0.012	J 0.015	0.3	1,2	J 0.037	0.09	0.09	0.98	1.3	2.1

Sample ID	1628V2-32-B17	1628V2-32-B18	1628V2-32-B19	1628V2-32-B20	Maximum Allowable Concentration						
Sample Depth (ft)	0-5	0-5	0-5	0-5	¹ Most Stringent ² Outside a Populated Area ³ Within a Populated non-Metropolitan Statistical Area ⁴ Within Chicago Corporate Limits ⁵ Within a Metropolitan Statistical Area						
Sample Date	6/1/2018	6/1/2018	6/1/2018	6/1/2018							
PID	0	0	0	0							
Sample pH	8.5	8.5	8.2	7.5							
Matrix	Soil	Soil	Soil	Soil							
Inorganic Compounds, Total (mg/kg)											
Arsenic	11	13	1,3	11	8.8	11.3	--	11.3	--	13	

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: 500-146314-2
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/14/2018 2:59:15 PM

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

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

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

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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B01

Lab Sample ID: 500-146314-3

Date Collected: 06/01/18 12:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Acetone	0.045		0.019	0.0083	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Bromomethane	<0.0048	*	0.0048	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	06/01/18 17:41	06/07/18 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	06/01/18 17:41	06/07/18 16:38	1
4-Bromofluorobenzene (Surr)	109		75 - 131	06/01/18 17:41	06/07/18 16:38	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/07/18 16:38	1
Toluene-d8 (Surr)	97		75 - 124	06/01/18 17:41	06/07/18 16:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B01

Lab Sample ID: 500-146314-3

Date Collected: 06/01/18 12:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Benzo[a]anthracene	0.016	J	0.037	0.0050	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Benzo[a]pyrene	0.019	J	0.037	0.0072	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Benzo[b]fluoranthene	0.023	J	0.037	0.0081	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Carbazole	0.11	J	0.19	0.094	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Chrysene	0.022	J	0.037	0.010	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Fluoranthene	0.024	J	0.037	0.0069	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B01

Lab Sample ID: 500-146314-3

Date Collected: 06/01/18 12:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Phenanthrene	0.017	J	0.037	0.0052	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Pyrene	0.024	J	0.037	0.0074	mg/Kg	☼	06/05/18 07:32	06/11/18 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		25 - 139				06/05/18 07:32	06/11/18 15:32	1
2-Fluorobiphenyl	93		44 - 121				06/05/18 07:32	06/11/18 15:32	1
2-Fluorophenol	130		46 - 133				06/05/18 07:32	06/11/18 15:32	1
Nitrobenzene-d5	90		41 - 120				06/05/18 07:32	06/11/18 15:32	1
Phenol-d5	124		46 - 125				06/05/18 07:32	06/11/18 15:32	1
Terphenyl-d14	113		35 - 160				06/05/18 07:32	06/11/18 15:32	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	☼	06/05/18 17:44	06/07/18 00:58	1
Arsenic	7.3		0.56	0.19	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Barium	68		0.56	0.064	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Beryllium	0.59		0.22	0.052	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Boron	6.4	B	2.8	0.26	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Cadmium	0.38	B	0.11	0.020	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Calcium	23000	B	11	1.9	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Chromium	9.7		0.56	0.28	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Cobalt	7.7		0.28	0.073	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Copper	19		0.56	0.16	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Iron	16000		11	5.8	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Lead	27		0.28	0.13	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Magnesium	14000		5.6	2.8	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Manganese	350		0.56	0.081	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Nickel	16		0.56	0.16	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Potassium	1000		28	9.9	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Selenium	0.88		0.56	0.33	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Silver	0.13	J	0.28	0.072	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Sodium	1700		56	8.3	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Vanadium	16		0.28	0.066	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1
Zinc	59		1.1	0.49	mg/Kg	☼	06/05/18 17:44	06/07/18 00:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.70		0.40	0.20	mg/L		06/07/18 15:17	06/08/18 12:44	1
Lead	0.0090		0.0075	0.0075	mg/L		06/07/18 15:17	06/08/18 12:44	1
Manganese	11		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:44	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B01

Lab Sample ID: 500-146314-3

Date Collected: 06/01/18 12:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.021	J	0.050	0.010	mg/L		06/07/18 15:13	06/08/18 10:48	1
Barium	0.30	J	0.50	0.050	mg/L		06/07/18 15:13	06/08/18 10:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:13	06/08/18 10:48	1
Boron	0.13		0.10	0.050	mg/L		06/07/18 15:13	06/08/18 10:48	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L		06/07/18 15:13	06/08/18 10:48	1
Calcium	14		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:48	1
Chromium	0.074		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:48	1
Cobalt	0.020	J	0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:48	1
Iron	79		0.40	0.20	mg/L		06/07/18 15:13	06/08/18 10:48	1
Lead	0.13		0.0075	0.0075	mg/L		06/07/18 15:13	06/08/18 10:48	1
Manganese	0.83		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:48	1
Nickel	0.058		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:48	1
Potassium	14		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:48	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:13	06/08/18 10:48	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:48	1
Zinc	0.27	J	0.50	0.020	mg/L		06/07/18 15:13	06/08/18 10:48	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:13	06/08/18 18:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:13	06/08/18 18:30	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 09:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.017	0.0056	mg/Kg	☼	06/05/18 15:30	06/06/18 18:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	06/13/18 13:10	06/13/18 16:12	1
pH	8.1		0.20	0.20	SU			06/08/18 15:58	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B02

Lab Sample ID: 500-146314-4

Date Collected: 06/01/18 12:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Acetone	0.019		0.019	0.0082	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Bromomethane	<0.0047	*	0.0047	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	06/01/18 17:41	06/07/18 17:05	1
4-Bromofluorobenzene (Surr)	106		75 - 131	06/01/18 17:41	06/07/18 17:05	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/07/18 17:05	1
Toluene-d8 (Surr)	96		75 - 124	06/01/18 17:41	06/07/18 17:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B02

Lab Sample ID: 500-146314-4

Date Collected: 06/01/18 12:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2-Nitroaniline	<0.18		0.18	0.050	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.052	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.049	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Anthracene	0.012	J	0.037	0.0061	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Benzo[a]anthracene	0.059		0.037	0.0050	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Benzo[a]pyrene	0.062		0.037	0.0071	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Benzo[b]fluoranthene	0.083		0.037	0.0079	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Carbazole	0.12	J	0.18	0.092	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Chrysene	0.065		0.037	0.010	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Fluoranthene	0.095		0.037	0.0068	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Fluorene	0.0057	J	0.037	0.0052	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B02

Lab Sample ID: 500-146314-4

Date Collected: 06/01/18 12:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0095	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Phenanthrene	0.063		0.037	0.0051	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Phenol	<0.18		0.18	0.082	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1
Pyrene	0.16		0.037	0.0073	mg/Kg	☼	06/05/18 07:32	06/08/18 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		25 - 139	06/05/18 07:32	06/08/18 20:32	1
2-Fluorobiphenyl	92		44 - 121	06/05/18 07:32	06/08/18 20:32	1
2-Fluorophenol	115		46 - 133	06/05/18 07:32	06/08/18 20:32	1
Nitrobenzene-d5	84		41 - 120	06/05/18 07:32	06/08/18 20:32	1
Phenol-d5	108		46 - 125	06/05/18 07:32	06/08/18 20:32	1
Terphenyl-d14	194	X	35 - 160	06/05/18 07:32	06/08/18 20:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.22	J	1.1	0.20	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Arsenic	4.0		0.53	0.18	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Barium	29		0.53	0.060	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Beryllium	0.40		0.21	0.049	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Boron	11	B	2.6	0.25	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Cadmium	0.20	B	0.11	0.019	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Calcium	150000	B	110	18	mg/Kg	☼	06/05/18 17:44	06/07/18 12:28	10
Chromium	6.8		0.53	0.26	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Cobalt	3.8		0.26	0.069	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Copper	11		0.53	0.15	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Iron	9500		11	5.5	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Lead	12		0.26	0.12	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Magnesium	85000		53	26	mg/Kg	☼	06/05/18 17:44	06/07/18 12:28	10
Manganese	320		0.53	0.076	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Nickel	9.9		0.53	0.15	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Potassium	1200		26	9.3	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Silver	0.082	J	0.26	0.068	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Sodium	1500		53	7.8	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Vanadium	11		0.26	0.062	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1
Zinc	29		1.1	0.46	mg/Kg	☼	06/05/18 17:44	06/07/18 01:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:17	06/08/18 12:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:17	06/08/18 12:48	1
Manganese	5.6		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B02

Lab Sample ID: 500-146314-4

Date Collected: 06/01/18 12:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.019	J	0.050	0.010	mg/L		06/07/18 15:13	06/08/18 10:52	1
Barium	0.30	J	0.50	0.050	mg/L		06/07/18 15:13	06/08/18 10:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:13	06/08/18 10:52	1
Boron	0.16		0.10	0.050	mg/L		06/07/18 15:13	06/08/18 10:52	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L		06/07/18 15:13	06/08/18 10:52	1
Calcium	24		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:52	1
Chromium	0.085		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:52	1
Cobalt	0.026		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:52	1
Iron	75		0.40	0.20	mg/L		06/07/18 15:13	06/08/18 10:52	1
Lead	0.063		0.0075	0.0075	mg/L		06/07/18 15:13	06/08/18 10:52	1
Manganese	0.87		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:52	1
Nickel	0.072		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:52	1
Potassium	24		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:52	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:13	06/08/18 10:52	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:52	1
Zinc	0.23	J	0.50	0.020	mg/L		06/07/18 15:13	06/08/18 10:52	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:13	06/08/18 18:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:13	06/08/18 18:34	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00030		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.016	0.0054	mg/Kg	☼	06/05/18 15:30	06/06/18 18:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/13/18 13:10	06/13/18 16:12	1
pH	8.9		0.20	0.20	SU			06/08/18 16:00	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B03

Lab Sample ID: 500-146314-5

Date Collected: 06/01/18 12:15

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Acetone	0.024		0.017	0.0074	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/01/18 17:41	06/07/18 17:32	1
4-Bromofluorobenzene (Surr)	110		75 - 131	06/01/18 17:41	06/07/18 17:32	1
Dibromofluoromethane	80		75 - 126	06/01/18 17:41	06/07/18 17:32	1
Toluene-d8 (Surr)	99		75 - 124	06/01/18 17:41	06/07/18 17:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B03

Lab Sample ID: 500-146314-5

Date Collected: 06/01/18 12:15

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2-Methylnaphthalene	0.012	J	0.074	0.0067	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Benzo[a]anthracene	0.017	J	0.036	0.0049	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Benzo[a]pyrene	0.023	J	0.036	0.0071	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Benzo[b]fluoranthene	0.034	J	0.036	0.0079	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Benzo[g,h,i]perylene	0.016	J	0.036	0.012	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Chrysene	0.027	J	0.036	0.010	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Fluoranthene	0.029	J	0.036	0.0068	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B03

Lab Sample ID: 500-146314-5

Date Collected: 06/01/18 12:15

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.015	J	0.036	0.0095	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Phenanthrene	0.026	J	0.036	0.0051	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Pyrene	0.031	J	0.036	0.0073	mg/Kg	☼	06/05/18 07:32	06/08/18 15:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	66		25 - 139				06/05/18 07:32	06/08/18 15:54	1
2-Fluorobiphenyl	89		44 - 121				06/05/18 07:32	06/08/18 15:54	1
2-Fluorophenol	116		46 - 133				06/05/18 07:32	06/08/18 15:54	1
Nitrobenzene-d5	86		41 - 120				06/05/18 07:32	06/08/18 15:54	1
Phenol-d5	109		46 - 125				06/05/18 07:32	06/08/18 15:54	1
Terphenyl-d14	113		35 - 160				06/05/18 07:32	06/08/18 15:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	J	1.1	0.22	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Arsenic	8.6		0.56	0.19	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Barium	40		0.56	0.064	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Beryllium	0.52		0.22	0.052	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Boron	9.1	B	2.8	0.26	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Cadmium	0.38	B	0.11	0.020	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Calcium	99000	B	110	19	mg/Kg	☼	06/05/18 17:44	06/07/18 12:32	10
Chromium	12		0.56	0.28	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Cobalt	7.3		0.28	0.074	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Copper	21		0.56	0.16	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Iron	17000		11	5.8	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Lead	22		0.28	0.13	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Magnesium	38000		5.6	2.8	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Manganese	380		0.56	0.081	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Nickel	19		0.56	0.16	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Potassium	1500		28	9.9	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Selenium	0.70		0.56	0.33	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Silver	0.15	J	0.28	0.072	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Sodium	1600		56	8.3	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Vanadium	15		0.28	0.066	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1
Zinc	77		1.1	0.49	mg/Kg	☼	06/05/18 17:44	06/07/18 01:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:17	06/08/18 12:53	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:53	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:17	06/08/18 12:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:17	06/08/18 12:53	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B03

Lab Sample ID: 500-146314-5

Date Collected: 06/01/18 12:15

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	6.6		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:53	1
Nickel	0.014	J	0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.034	J	0.050	0.010	mg/L		06/07/18 15:13	06/08/18 10:56	1
Barium	0.43	J	0.50	0.050	mg/L		06/07/18 15:13	06/08/18 10:56	1
Beryllium	0.0053		0.0040	0.0040	mg/L		06/07/18 15:13	06/08/18 10:56	1
Boron	0.19		0.10	0.050	mg/L		06/07/18 15:13	06/08/18 10:56	1
Cadmium	0.0022	J	0.0050	0.0020	mg/L		06/07/18 15:13	06/08/18 10:56	1
Calcium	37		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:56	1
Chromium	0.12		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:56	1
Cobalt	0.048		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:56	1
Iron	120		0.40	0.20	mg/L		06/07/18 15:13	06/08/18 10:56	1
Lead	0.12		0.0075	0.0075	mg/L		06/07/18 15:13	06/08/18 10:56	1
Manganese	1.4		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:56	1
Nickel	0.12		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:56	1
Potassium	32		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 10:56	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:13	06/08/18 10:56	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 10:56	1
Zinc	0.38	J	0.50	0.020	mg/L		06/07/18 15:13	06/08/18 10:56	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:13	06/08/18 18:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:13	06/08/18 18:37	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0063	mg/Kg	☼	06/05/18 15:30	06/06/18 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/13/18 13:10	06/13/18 16:13	1
pH	8.5		0.20	0.20	SU			06/08/18 16:02	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B04

Lab Sample ID: 500-146314-6

Date Collected: 06/01/18 12:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Acetone	0.033		0.016	0.0070	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	06/01/18 17:41	06/07/18 18:00	1
4-Bromofluorobenzene (Surr)	107		75 - 131	06/01/18 17:41	06/07/18 18:00	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/07/18 18:00	1
Toluene-d8 (Surr)	98		75 - 124	06/01/18 17:41	06/07/18 18:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B04

Lab Sample ID: 500-146314-6

Date Collected: 06/01/18 12:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Carbazole	0.12 J		0.19	0.095	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B04

Lab Sample ID: 500-146314-6

Date Collected: 06/01/18 12:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Phenanthrene	0.0087	J	0.038	0.0053	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/05/18 07:32	06/08/18 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		25 - 139				06/05/18 07:32	06/08/18 12:40	1
2-Fluorobiphenyl	97		44 - 121				06/05/18 07:32	06/08/18 12:40	1
2-Fluorophenol	120		46 - 133				06/05/18 07:32	06/08/18 12:40	1
Nitrobenzene-d5	89		41 - 120				06/05/18 07:32	06/08/18 12:40	1
Phenol-d5	113		46 - 125				06/05/18 07:32	06/08/18 12:40	1
Terphenyl-d14	117		35 - 160				06/05/18 07:32	06/08/18 12:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Arsenic	7.5		0.57	0.20	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Barium	41		0.57	0.065	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Beryllium	0.70		0.23	0.054	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Boron	10	B	2.9	0.27	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Cadmium	0.26	B	0.11	0.021	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Calcium	66000	B	110	19	mg/Kg	☼	06/05/18 17:44	06/07/18 12:44	10
Chromium	15		0.57	0.28	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Cobalt	12		0.29	0.075	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Copper	19		0.57	0.16	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Iron	20000		11	6.0	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Lead	13		0.29	0.13	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Magnesium	22000		5.7	2.8	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Manganese	380		0.57	0.083	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Nickel	32		0.57	0.17	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Potassium	2300		29	10	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Selenium	0.76		0.57	0.34	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Silver	0.18	J	0.29	0.074	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Sodium	2200		57	8.5	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Vanadium	18		0.29	0.068	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1
Zinc	61		1.1	0.50	mg/Kg	☼	06/05/18 17:44	06/07/18 01:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/07/18 15:17	06/08/18 12:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:17	06/08/18 12:57	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:57	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:17	06/08/18 12:57	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B04

Lab Sample ID: 500-146314-6

Date Collected: 06/01/18 12:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:17	06/08/18 12:57	1
Manganese	6.3		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:57	1
Nickel	<0.025		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 12:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.080		0.050	0.010	mg/L		06/07/18 15:13	06/08/18 11:08	1
Barium	0.64		0.50	0.050	mg/L		06/07/18 15:13	06/08/18 11:08	1
Beryllium	0.0081		0.0040	0.0040	mg/L		06/07/18 15:13	06/08/18 11:08	1
Boron	0.27		0.10	0.050	mg/L		06/07/18 15:13	06/08/18 11:08	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		06/07/18 15:13	06/08/18 11:08	1
Calcium	60		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 11:08	1
Chromium	0.19		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:08	1
Cobalt	0.092		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:08	1
Iron	220		0.40	0.20	mg/L		06/07/18 15:13	06/08/18 11:08	1
Lead	0.13		0.0075	0.0075	mg/L		06/07/18 15:13	06/08/18 11:08	1
Manganese	3.1		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:08	1
Nickel	0.24		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:08	1
Potassium	51		2.5	0.50	mg/L		06/07/18 15:13	06/08/18 11:08	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:13	06/08/18 11:08	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:08	1
Zinc	0.57		0.50	0.020	mg/L		06/07/18 15:13	06/08/18 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:17	06/11/18 11:54	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:13	06/08/18 18:41	1
Thallium	0.0024		0.0020	0.0020	mg/L		06/07/18 15:13	06/08/18 18:41	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00033		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 09:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.019	0.0062	mg/Kg	☼	06/05/18 15:30	06/06/18 18:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	06/13/18 13:10	06/13/18 16:13	1
pH	8.5		0.20	0.20	SU			06/08/18 16:04	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B09

Lab Sample ID: 500-146314-12

Date Collected: 06/01/18 11:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Acetone	0.016		0.016	0.0070	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	06/01/18 17:41	06/07/18 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	06/01/18 17:41	06/07/18 20:44	1
4-Bromofluorobenzene (Surr)	107		75 - 131	06/01/18 17:41	06/07/18 20:44	1
Dibromofluoromethane	83		75 - 126	06/01/18 17:41	06/07/18 20:44	1
Toluene-d8 (Surr)	99		75 - 124	06/01/18 17:41	06/07/18 20:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
1,2-Dichlorobenzene	<0.17		0.17	0.042	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
1,4-Dichlorobenzene	<0.17		0.17	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B09

Lab Sample ID: 500-146314-12

Date Collected: 06/01/18 11:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.079	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
2-Nitrophenol	<0.35		0.35	0.082	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Acenaphthene	<0.035		0.035	0.0062	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Anthracene	<0.035		0.035	0.0058	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Benzo[a]anthracene	0.011	J	0.035	0.0047	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Benzo[a]pyrene	0.014	J	0.035	0.0067	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Benzo[b]fluoranthene	0.015	J	0.035	0.0075	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Benzo[g,h,i]perylene	0.011	J	0.035	0.011	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.064	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Chrysene	0.015	J	0.035	0.0095	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0067	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Fluoranthene	0.015	J	0.035	0.0064	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Hexachlorobutadiene	<0.17		0.17	0.055	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B09

Lab Sample ID: 500-146314-12

Date Collected: 06/01/18 11:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0090	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Naphthalene	<0.035		0.035	0.0053	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Phenanthrene	0.0081	J	0.035	0.0048	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Pyrene	0.016	J	0.035	0.0069	mg/Kg	☼	06/05/18 07:32	06/08/18 14:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		25 - 139				06/05/18 07:32	06/08/18 14:59	1
2-Fluorobiphenyl	98		44 - 121				06/05/18 07:32	06/08/18 14:59	1
2-Fluorophenol	124		46 - 133				06/05/18 07:32	06/08/18 14:59	1
Nitrobenzene-d5	93		41 - 120				06/05/18 07:32	06/08/18 14:59	1
Phenol-d5	112		46 - 125				06/05/18 07:32	06/08/18 14:59	1
Terphenyl-d14	114		35 - 160				06/05/18 07:32	06/08/18 14:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Arsenic	10		0.52	0.18	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Barium	32		0.52	0.060	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Beryllium	0.49		0.21	0.049	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Boron	8.2	B	2.6	0.24	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Cadmium	0.37	B	0.10	0.019	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Calcium	110000	B	100	18	mg/Kg	☼	06/05/18 17:44	06/07/18 13:08	10
Chromium	8.7		0.52	0.26	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Cobalt	6.6		0.26	0.069	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Copper	18		0.52	0.15	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Iron	20000		10	5.4	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Lead	23		0.26	0.12	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Magnesium	46000		5.2	2.6	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Manganese	370		0.52	0.076	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Nickel	17		0.52	0.15	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Potassium	1200		26	9.3	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Selenium	0.74		0.52	0.31	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Silver	0.11	J	0.26	0.068	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Sodium	1100		52	7.7	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Vanadium	13		0.26	0.062	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1
Zinc	66		1.0	0.46	mg/Kg	☼	06/05/18 17:44	06/07/18 01:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:17	06/08/18 13:22	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 13:22	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:17	06/08/18 13:22	1
Lead	<0.0075	F1	0.0075	0.0075	mg/L		06/07/18 15:17	06/08/18 13:22	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Client Sample ID: 1628V2-32-B09

Lab Sample ID: 500-146314-12

Date Collected: 06/01/18 11:05

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	6.1		0.025	0.010	mg/L		06/07/18 15:17	06/08/18 13:22	1
Nickel	0.017	J	0.025	0.010	mg/L		06/07/18 15:17	06/08/18 13:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.023	J	0.050	0.010	mg/L		06/07/18 15:13	06/08/18 11:31	1
Barium	0.46	J	0.50	0.050	mg/L		06/07/18 15:13	06/08/18 11:31	1
Beryllium	0.0050		0.0040	0.0040	mg/L		06/07/18 15:13	06/08/18 11:31	1
Boron	0.20		0.10	0.050	mg/L		06/07/18 15:13	06/08/18 11:31	1
Cadmium	0.0022	J	0.0050	0.0020	mg/L		06/07/18 15:13	06/08/18 11:31	1
Calcium	27	F1	2.5	0.50	mg/L		06/07/18 15:13	06/08/18 11:31	1
Chromium	0.12		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:31	1
Cobalt	0.031		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:31	1
Iron	110		0.40	0.20	mg/L		06/07/18 15:13	06/08/18 11:31	1
Lead	0.054		0.0075	0.0075	mg/L		06/07/18 15:13	06/08/18 11:31	1
Manganese	0.92	F1	0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:31	1
Nickel	0.11		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:31	1
Potassium	34	F1	2.5	0.50	mg/L		06/07/18 15:13	06/08/18 11:31	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:13	06/08/18 11:31	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:13	06/08/18 11:31	1
Zinc	0.34	J	0.50	0.020	mg/L		06/07/18 15:13	06/08/18 11:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:17	06/11/18 12:14	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		06/07/18 15:13	06/08/18 19:11	1
Thallium	0.0024	F1	0.0020	0.0020	mg/L		06/07/18 15:13	06/08/18 19:11	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00027		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.017	0.0057	mg/Kg	☼	06/05/18 15:30	06/06/18 18:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	06/12/18 15:20	06/12/18 17:55	1
pH	7.8		0.20	0.20	SU			06/08/18 16:16	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146314-2

Laboratory: TestAmerica Chicago

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

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

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

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

CHAIN OF CUSTODY RECORD




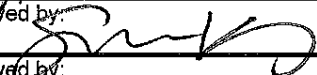
Client Contact	Laboratory	Project Name: <u>I-80 WILL COUNTY</u>	COC No.: <u>1</u> of <u>3</u>
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>PT13 184-006/ AE7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>7 BD</u>	Lab Job No.: <u>500-146314</u> Sample Temp:

Special Instructions:
See Table 2 for complete parameter lists and minimum reporting limits.
* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
*** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES													
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments	
3	1628V2-32-1301	6-1-18	1245	S	X	X					X	X	X	X	X		TB 14	
4	1628V2-32-1302	↓	1225															
5	1628V2-32-1303		1215															
6	1628V2-32-1304		1200															
7	1628V2-32-1305		1150															
8	1628V2-32-1306		1140															↓
9	1628V2-32-1307		1125															TB 13
10	1628V2-32-1307 DUP		1130															
11	1628V2-32-1308		1115															
12	1628V2-32-1309		1105															↓
	1628V2-32-1310-1																	
13	TRIP BLANK 12		6-1-18			X												

Relinquished by: 	Date/Time: <u>6-1-18 1400</u>	Received by: 	Date/Time: <u>6-1-18 1405</u>
Relinquished by: 	Date/Time: <u>6-1-18 1455</u>	Received by: 	Date/Time: <u>06/01/18 1455</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

Login Sample Receipt Checklist

Client: Andrews Engineering Inc.

Job Number: 500-146314-2

Login Number: 146314

List Source: TestAmerica Chicago

List Number: 1

Creator: Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	(4.8)(3.6)(3.2)(5.1)(2.4)(2.2)c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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: 500-146315-1
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/13/2018 5:12:20 PM

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

LINKS

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www.testamericainc.com

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

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

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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13

Lab Sample ID: 500-146315-1

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Acetone	0.034		0.016	0.0068	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Bromomethane	<0.0039	*	0.0039	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	06/01/18 17:41	06/08/18 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 134	06/01/18 17:41	06/08/18 14:41	1
4-Bromofluorobenzene (Surr)	108		75 - 131	06/01/18 17:41	06/08/18 14:41	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/08/18 14:41	1
Toluene-d8 (Surr)	96		75 - 124	06/01/18 17:41	06/08/18 14:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13

Lab Sample ID: 500-146315-1

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2,4-Dinitrophenol	<0.71	F1	0.71	0.62	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
4,6-Dinitro-2-methylphenol	<0.71	F1	0.71	0.28	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Benzo[a]anthracene	0.0080	J *	0.035	0.0048	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Benzo[a]pyrene	0.012	J	0.035	0.0068	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Benzo[b]fluoranthene	0.013	J	0.035	0.0076	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Benzo[g,h,i]perylene	<0.035	F1	0.035	0.011	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Bis(2-ethylhexyl) phthalate	<0.18	F1	0.18	0.065	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Butyl benzyl phthalate	<0.18	F1	0.18	0.067	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Carbazole	<0.18	*	0.18	0.088	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Chrysene	0.013	J	0.035	0.0096	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Dibenz(a,h)anthracene	<0.035	F1	0.035	0.0068	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Di-n-octyl phthalate	<0.18	F1	0.18	0.058	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Fluoranthene	0.015	J	0.035	0.0066	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Hexachlorocyclopentadiene	<0.71	F1	0.71	0.20	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Hexachloroethane	<0.18	F1	0.18	0.054	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13

Lab Sample ID: 500-146315-1

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
N-Nitrosodiphenylamine	<0.18 *		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Phenanthrene	0.010	J	0.035	0.0049	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Pyrene	0.017	J F1	0.035	0.0070	mg/Kg	☼	06/06/18 07:24	06/12/18 12:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		25 - 139				06/06/18 07:24	06/12/18 12:04	1
2-Fluorobiphenyl	85		44 - 121				06/06/18 07:24	06/12/18 12:04	1
2-Fluorophenol	105		46 - 133				06/06/18 07:24	06/12/18 12:04	1
Nitrobenzene-d5	76		41 - 120				06/06/18 07:24	06/12/18 12:04	1
Phenol-d5	104		46 - 125				06/06/18 07:24	06/12/18 12:04	1
Terphenyl-d14	113		35 - 160				06/06/18 07:24	06/12/18 12:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.21	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Arsenic	9.3	F1 F2	0.54	0.19	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Barium	22		0.54	0.062	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Beryllium	0.37		0.22	0.051	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Boron	6.7	B	2.7	0.25	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Cadmium	0.43	B	0.11	0.020	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Calcium	140000	B F2	110	18	mg/Kg	☼	06/05/18 17:50	06/06/18 22:17	10
Chromium	6.3		0.54	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Cobalt	5.9		0.27	0.071	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Copper	15	F1 F2	0.54	0.15	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Iron	15000	B F2	11	5.7	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Lead	13	F1 F2	0.27	0.13	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Magnesium	42000	B F2	5.4	2.7	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Manganese	420	B	0.54	0.079	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Nickel	15		0.54	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Potassium	1000	F1	27	9.6	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Selenium	0.78	B F1	0.54	0.32	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Silver	0.11	J	0.27	0.070	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Sodium	1200	F1	54	8.1	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Vanadium	9.6		0.27	0.064	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1
Zinc	59	F1 F2	1.1	0.48	mg/Kg	☼	06/05/18 17:50	06/06/18 11:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:25	06/08/18 13:56	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 13:56	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:25	06/08/18 13:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 13:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13

Lab Sample ID: 500-146315-1

Date Collected: 06/01/18 10:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	5.9		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 13:56	1
Nickel	0.011	J	0.025	0.010	mg/L		06/07/18 15:25	06/08/18 13:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.020	J	0.050	0.010	mg/L		06/07/18 15:14	06/08/18 11:56	1
Barium	0.40	J	0.50	0.050	mg/L		06/07/18 15:14	06/08/18 11:56	1
Beryllium	0.0042		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 11:56	1
Boron	0.18		0.10	0.050	mg/L		06/07/18 15:14	06/08/18 11:56	1
Cadmium	0.0028	J	0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 11:56	1
Calcium	22		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 11:56	1
Chromium	0.11		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 11:56	1
Cobalt	0.034		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 11:56	1
Iron	110		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 11:56	1
Lead	0.061		0.0075	0.0075	mg/L		06/07/18 15:14	06/08/18 11:56	1
Manganese	1.0		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 11:56	1
Nickel	0.11		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 11:56	1
Potassium	31		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 11:56	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 11:56	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 11:56	1
Zinc	0.42	J	0.50	0.020	mg/L		06/07/18 15:14	06/08/18 11:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:25	06/11/18 13:36	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 19:45	1
Thallium	0.0031		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 19:45	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	F1	0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017		0.016	0.0055	mg/Kg	☼	06/06/18 16:10	06/07/18 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	06/12/18 15:20	06/12/18 17:55	1
pH	8.5		0.20	0.20	SU			06/08/18 16:18	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13 Dup

Lab Sample ID: 500-146315-2

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
2-Butanone (MEK)	0.0045		0.0040	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Acetone	0.041		0.016	0.0069	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 15:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/01/18 17:41	06/08/18 15:08	1
4-Bromofluorobenzene (Surr)	105		75 - 131	06/01/18 17:41	06/08/18 15:08	1
Dibromofluoromethane	81		75 - 126	06/01/18 17:41	06/08/18 15:08	1
Toluene-d8 (Surr)	97		75 - 124	06/01/18 17:41	06/08/18 15:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13 Dup

Lab Sample ID: 500-146315-2

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Benzo[a]anthracene	0.011	J *	0.036	0.0049	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Benzo[a]pyrene	0.015	J	0.036	0.0070	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Benzo[b]fluoranthene	0.021	J	0.036	0.0078	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Carbazole	<0.18	*	0.18	0.090	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Chrysene	0.018	J	0.036	0.0098	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Fluoranthene	0.017	J	0.036	0.0067	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13 Dup

Lab Sample ID: 500-146315-2

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
N-Nitrosodiphenylamine	<0.18 *		0.18	0.043	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Phenanthrene	0.0091	J	0.036	0.0050	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Pyrene	0.038		0.036	0.0072	mg/Kg	☼	06/06/18 07:24	06/12/18 13:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		25 - 139				06/06/18 07:24	06/12/18 13:28	1
2-Fluorobiphenyl	89		44 - 121				06/06/18 07:24	06/12/18 13:28	1
2-Fluorophenol	108		46 - 133				06/06/18 07:24	06/12/18 13:28	1
Nitrobenzene-d5	78		41 - 120				06/06/18 07:24	06/12/18 13:28	1
Phenol-d5	106		46 - 125				06/06/18 07:24	06/12/18 13:28	1
Terphenyl-d14	180	X	35 - 160				06/06/18 07:24	06/12/18 13:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Arsenic	11		0.54	0.18	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Barium	26		0.54	0.062	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Beryllium	0.38		0.22	0.051	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Boron	7.7	B	2.7	0.25	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Cadmium	0.40	B	0.11	0.019	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Calcium	110000	B	110	18	mg/Kg	☼	06/05/18 17:50	06/06/18 22:46	10
Chromium	7.1		0.54	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Cobalt	6.6		0.27	0.071	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Copper	18		0.54	0.15	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Iron	17000	B	11	5.6	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Lead	19		0.27	0.12	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Magnesium	43000	B	5.4	2.7	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Manganese	380	B	0.54	0.078	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Nickel	17		0.54	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Potassium	1100		27	9.6	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Selenium	1.0	B	0.54	0.32	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Silver	0.12	J	0.27	0.070	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Sodium	1100		54	8.0	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Vanadium	11		0.27	0.064	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1
Zinc	67		1.1	0.47	mg/Kg	☼	06/05/18 17:50	06/06/18 12:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:25	06/08/18 14:00	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:00	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:25	06/08/18 14:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 14:00	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B13 Dup

Lab Sample ID: 500-146315-2

Date Collected: 06/01/18 10:50

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	6.2		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:00	1
Nickel	0.013	J	0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.037	J	0.050	0.010	mg/L		06/07/18 15:14	06/08/18 12:00	1
Barium	0.40	J	0.50	0.050	mg/L		06/07/18 15:14	06/08/18 12:00	1
Beryllium	0.0048		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 12:00	1
Boron	0.18		0.10	0.050	mg/L		06/07/18 15:14	06/08/18 12:00	1
Cadmium	0.0029	J	0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 12:00	1
Calcium	22		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:00	1
Chromium	0.11		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:00	1
Cobalt	0.041		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:00	1
Iron	130		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 12:00	1
Lead	0.071		0.0075	0.0075	mg/L		06/07/18 15:14	06/08/18 12:00	1
Manganese	1.1		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:00	1
Nickel	0.12		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:00	1
Potassium	30		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:00	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 12:00	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:00	1
Zinc	0.43	J	0.50	0.020	mg/L		06/07/18 15:14	06/08/18 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:25	06/11/18 13:40	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 19:49	1
Thallium	0.0028		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 19:49	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.016	0.0054	mg/Kg	☼	06/06/18 16:10	06/07/18 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/12/18 15:20	06/12/18 17:56	1
pH	8.9		0.20	0.20	SU			06/08/18 16:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B14-1

Lab Sample ID: 500-146315-3

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
1,1-Dichloroethene	<0.0018		0.0018	0.00064	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
2-Butanone (MEK)	0.0047		0.0046	0.0020	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Acetone	0.047		0.018	0.0080	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Bromodichloromethane	<0.0018		0.0018	0.00038	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Bromomethane	<0.0046 *		0.0046	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Carbon tetrachloride	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		70 - 134	06/01/18 17:41	06/08/18 15:34	1
4-Bromofluorobenzene (Surr)	114		75 - 131	06/01/18 17:41	06/08/18 15:34	1
Dibromofluoromethane	83		75 - 126	06/01/18 17:41	06/08/18 15:34	1
Toluene-d8 (Surr)	98		75 - 124	06/01/18 17:41	06/08/18 15:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B14-3

Lab Sample ID: 500-146315-3

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Acenaphthylene	0.0088	J	0.036	0.0048	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Anthracene	0.019	J	0.036	0.0060	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Benzo[a]anthracene	0.20	*	0.036	0.0049	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Benzo[a]pyrene	0.30		0.036	0.0070	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Benzo[b]fluoranthene	0.51		0.036	0.0078	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Benzo[g,h,i]perylene	0.20		0.036	0.012	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Benzo[k]fluoranthene	0.20		0.036	0.011	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Bis(2-ethylhexyl) phthalate	0.070	J	0.18	0.066	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Carbazole	0.13	J *	0.18	0.090	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Chrysene	0.28		0.036	0.0098	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Dibenz(a,h)anthracene	0.041		0.036	0.0070	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Fluoranthene	0.32		0.036	0.0067	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Fluorene	0.0071	J	0.036	0.0051	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B14-1

Lab Sample ID: 500-146315-3

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.16		0.036	0.0093	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
N-Nitrosodiphenylamine	<0.18 *		0.18	0.043	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Phenanthrene	0.091		0.036	0.0050	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Pyrene	0.48		0.036	0.0072	mg/Kg	☼	06/06/18 07:24	06/12/18 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		25 - 139				06/06/18 07:24	06/12/18 12:32	1
2-Fluorobiphenyl	94		44 - 121				06/06/18 07:24	06/12/18 12:32	1
2-Fluorophenol	116		46 - 133				06/06/18 07:24	06/12/18 12:32	1
Nitrobenzene-d5	89		41 - 120				06/06/18 07:24	06/12/18 12:32	1
Phenol-d5	108		46 - 125				06/06/18 07:24	06/12/18 12:32	1
Terphenyl-d14	166 X		35 - 160				06/06/18 07:24	06/12/18 12:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.1	0.21	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Arsenic	2.6		0.55	0.19	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Barium	23		0.55	0.063	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Beryllium	0.25		0.22	0.051	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Boron	9.7	B	2.8	0.26	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Cadmium	0.23	B	0.11	0.020	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Calcium	200000	B	110	19	mg/Kg	☼	06/05/18 17:50	06/06/18 22:50	10
Chromium	16		0.55	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Cobalt	2.2		0.28	0.072	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Copper	19		0.55	0.15	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Iron	9200	B	11	5.7	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Lead	23		0.28	0.13	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Magnesium	120000	B	55	27	mg/Kg	☼	06/05/18 17:50	06/06/18 22:50	10
Manganese	310	B	0.55	0.080	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Nickel	7.7		0.55	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Potassium	640		28	9.7	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Silver	<0.28		0.28	0.071	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Sodium	700		55	8.1	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Vanadium	8.9		0.28	0.065	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1
Zinc	59		1.1	0.48	mg/Kg	☼	06/05/18 17:50	06/06/18 12:09	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.27	J	0.40	0.20	mg/L		06/07/18 15:25	06/08/18 14:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 14:05	1
Manganese	3.4		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:05	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B14-1

Lab Sample ID: 500-146315-3

Date Collected: 06/01/18 10:30

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/07/18 15:14	06/08/18 12:04	1
Barium	0.19	J	0.50	0.050	mg/L		06/07/18 15:14	06/08/18 12:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 12:04	1
Boron	0.096	J	0.10	0.050	mg/L		06/07/18 15:14	06/08/18 12:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 12:04	1
Calcium	18		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:04	1
Chromium	0.059		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:04	1
Cobalt	0.011	J	0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:04	1
Iron	41		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 12:04	1
Lead	0.094		0.0075	0.0075	mg/L		06/07/18 15:14	06/08/18 12:04	1
Manganese	0.36		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:04	1
Nickel	0.040		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:04	1
Potassium	14		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:04	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 12:04	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:04	1
Zinc	0.27	J	0.50	0.020	mg/L		06/07/18 15:14	06/08/18 12:04	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 19:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 19:53	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.017	0.0057	mg/Kg	☼	06/06/18 16:10	06/07/18 19:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	06/12/18 15:20	06/12/18 17:56	1
pH	8.9		0.20	0.20	SU			06/08/18 16:22	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B16

Lab Sample ID: 500-146315-5

Date Collected: 06/01/18 10:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Acetone	0.025		0.017	0.0076	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Bromomethane	<0.0044	*	0.0044	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 134	06/01/18 17:41	06/08/18 16:26	1
4-Bromofluorobenzene (Surr)	109		75 - 131	06/01/18 17:41	06/08/18 16:26	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/08/18 16:26	1
Toluene-d8 (Surr)	95		75 - 124	06/01/18 17:41	06/08/18 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B16

Lab Sample ID: 500-146315-5

Date Collected: 06/01/18 10:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2-Methylnaphthalene	0.023	J	0.079	0.0072	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Anthracene	0.0082	J	0.039	0.0066	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Benzo[a]anthracene	0.033	J *	0.039	0.0053	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Benzo[a]pyrene	0.037	J	0.039	0.0076	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Benzo[b]fluoranthene	0.048	J	0.039	0.0085	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Benzo[g,h,i]perylene	0.015	J	0.039	0.013	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Benzo[k]fluoranthene	0.019	J	0.039	0.012	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Carbazole	<0.20	*	0.20	0.098	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Chrysene	0.035	J	0.039	0.011	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Dibenz(a,h)anthracene	0.010	J	0.039	0.0076	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Fluoranthene	0.069	J	0.039	0.0073	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B16

Lab Sample ID: 500-146315-5

Date Collected: 06/01/18 10:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.020	J	0.039	0.010	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Naphthalene	0.010	J	0.039	0.0060	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Phenanthrene	0.057		0.039	0.0055	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Pyrene	0.057		0.039	0.0078	mg/Kg	☼	06/06/18 07:24	06/09/18 18:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	98		25 - 139				06/06/18 07:24	06/09/18 18:04	1
2-Fluorobiphenyl	82		44 - 121				06/06/18 07:24	06/09/18 18:04	1
2-Fluorophenol	110		46 - 133				06/06/18 07:24	06/09/18 18:04	1
Nitrobenzene-d5	85		41 - 120				06/06/18 07:24	06/09/18 18:04	1
Phenol-d5	103		46 - 125				06/06/18 07:24	06/09/18 18:04	1
Terphenyl-d14	95		35 - 160				06/06/18 07:24	06/09/18 18:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.2	0.23	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Arsenic	10		0.60	0.21	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Barium	53		0.60	0.068	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Beryllium	0.52		0.24	0.056	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Boron	7.2	B	3.0	0.28	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Cadmium	0.51	B	0.12	0.022	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Calcium	92000	B	120	20	mg/Kg	☼	06/05/18 17:50	06/06/18 22:58	10
Chromium	7.8		0.60	0.30	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Cobalt	6.0		0.30	0.079	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Copper	17		0.60	0.17	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Iron	17000	B	12	6.2	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Lead	54		0.30	0.14	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Magnesium	40000	B	6.0	3.0	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Manganese	480	B	0.60	0.087	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Nickel	14		0.60	0.17	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Potassium	1000		30	11	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Selenium	0.97	B	0.60	0.35	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Silver	0.11	J	0.30	0.077	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Sodium	2000		60	8.9	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Vanadium	12		0.30	0.071	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1
Zinc	95		1.2	0.53	mg/Kg	☼	06/05/18 17:50	06/06/18 12:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:25	06/08/18 14:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 14:13	1
Manganese	3.0		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:13	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B16

Lab Sample ID: 500-146315-5

Date Collected: 06/01/18 10:00

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.017	J	0.050	0.010	mg/L		06/07/18 15:14	06/08/18 12:12	1
Barium	0.24	J	0.50	0.050	mg/L		06/07/18 15:14	06/08/18 12:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 12:12	1
Boron	0.12		0.10	0.050	mg/L		06/07/18 15:14	06/08/18 12:12	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 12:12	1
Calcium	17		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:12	1
Chromium	0.066		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:12	1
Cobalt	0.018	J	0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:12	1
Iron	69		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 12:12	1
Lead	0.14		0.0075	0.0075	mg/L		06/07/18 15:14	06/08/18 12:12	1
Manganese	0.71		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:12	1
Nickel	0.057		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:12	1
Potassium	17		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:12	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 12:12	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:12	1
Zinc	0.32	J	0.50	0.020	mg/L		06/07/18 15:14	06/08/18 12:12	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 20:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 20:01	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00021		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.018	0.0058	mg/Kg	☼	06/06/18 16:10	06/07/18 19:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.18	mg/Kg	☼	06/12/18 15:20	06/12/18 17:57	1
pH	8.4		0.20	0.20	SU			06/08/18 16:26	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B17

Lab Sample ID: 500-146315-6

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
1,1-Dichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
1,1-Dichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
1,2-Dichloropropane	<0.0014		0.0014	0.00036	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
2-Butanone (MEK)	<0.0035		0.0035	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Acetone	0.010	J	0.014	0.0060	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Benzene	<0.0014		0.0014	0.00035	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Bromodichloromethane	<0.0014		0.0014	0.00028	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Bromoform	<0.0014		0.0014	0.00040	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Bromomethane	<0.0035	*	0.0035	0.0013	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Carbon disulfide	<0.0035		0.0035	0.00072	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Carbon tetrachloride	<0.0014		0.0014	0.00040	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Chlorobenzene	<0.0014		0.0014	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Chloroform	<0.0014		0.0014	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00039	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00042	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Dibromochloromethane	<0.0014		0.0014	0.00045	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Ethylbenzene	<0.0014		0.0014	0.00066	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Styrene	<0.0014		0.0014	0.00042	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Tetrachloroethene	<0.0014		0.0014	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Toluene	<0.0014		0.0014	0.00035	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00061	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Trichloroethene	<0.0014		0.0014	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Vinyl chloride	<0.0014		0.0014	0.00061	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1
Xylenes, Total	<0.0028		0.0028	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	06/01/18 17:41	06/08/18 16:52	1
4-Bromofluorobenzene (Surr)	115		75 - 131	06/01/18 17:41	06/08/18 16:52	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/08/18 16:52	1
Toluene-d8 (Surr)	99		75 - 124	06/01/18 17:41	06/08/18 16:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B17

Lab Sample ID: 500-146315-6

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Benzo[a]anthracene	<0.036	*	0.036	0.0049	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Benzo[a]pyrene	0.013	J	0.036	0.0071	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Carbazole	<0.18	*	0.18	0.091	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Fluoranthene	0.0083	J	0.036	0.0068	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B17

Lab Sample ID: 500-146315-6

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
N-Nitrosodiphenylamine	<0.18 *		0.18	0.043	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Phenanthrene	0.013	J	0.036	0.0051	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Pyrene	0.0086	J	0.036	0.0073	mg/Kg	☼	06/06/18 07:24	06/09/18 18:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		25 - 139				06/06/18 07:24	06/09/18 18:30	1
2-Fluorobiphenyl	83		44 - 121				06/06/18 07:24	06/09/18 18:30	1
2-Fluorophenol	109		46 - 133				06/06/18 07:24	06/09/18 18:30	1
Nitrobenzene-d5	84		41 - 120				06/06/18 07:24	06/09/18 18:30	1
Phenol-d5	103		46 - 125				06/06/18 07:24	06/09/18 18:30	1
Terphenyl-d14	97		35 - 160				06/06/18 07:24	06/09/18 18:30	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	☼	06/05/18 17:50	06/06/18 12:35	1
Arsenic	11		0.55	0.19	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Barium	32		0.55	0.063	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Beryllium	0.48		0.22	0.052	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Boron	8.7	B	2.8	0.26	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Cadmium	0.40	B	0.11	0.020	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Calcium	89000	B	110	19	mg/Kg	☼	06/05/18 17:50	06/06/18 23:02	10
Chromium	9.3		0.55	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Cobalt	8.2		0.28	0.073	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Copper	19		0.55	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Iron	19000	B	11	5.8	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Lead	18		0.28	0.13	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Magnesium	37000	B	5.5	2.7	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Manganese	430	B	0.55	0.080	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Nickel	21		0.55	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Potassium	1400		28	9.8	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Selenium	0.96	B	0.55	0.33	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Silver	0.18	J	0.28	0.072	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Sodium	1200		55	8.2	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Vanadium	13		0.28	0.065	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1
Zinc	69		1.1	0.49	mg/Kg	☼	06/05/18 17:50	06/06/18 12:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:25	06/08/18 14:25	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:25	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:25	06/08/18 14:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 14:25	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B17

Lab Sample ID: 500-146315-6

Date Collected: 06/01/18 09:45

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	7.1		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:25	1
Nickel	0.014	J	0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.039	J	0.050	0.010	mg/L		06/07/18 15:14	06/08/18 12:16	1
Barium	0.40	J	0.50	0.050	mg/L		06/07/18 15:14	06/08/18 12:16	1
Beryllium	0.0051		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 12:16	1
Boron	0.19		0.10	0.050	mg/L		06/07/18 15:14	06/08/18 12:16	1
Cadmium	0.0021	J	0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 12:16	1
Calcium	24		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:16	1
Chromium	0.11		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:16	1
Cobalt	0.043		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:16	1
Iron	130		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 12:16	1
Lead	0.054		0.0075	0.0075	mg/L		06/07/18 15:14	06/08/18 12:16	1
Manganese	1.3		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:16	1
Nickel	0.13		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:16	1
Potassium	32		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:16	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 12:16	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:16	1
Zinc	0.42	J	0.50	0.020	mg/L		06/07/18 15:14	06/08/18 12:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:25	06/11/18 13:48	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 20:04	1
Thallium	0.0029		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 20:04	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00023		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.017	0.0056	mg/Kg	☼	06/06/18 16:10	06/07/18 19:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	06/12/18 15:20	06/12/18 17:57	1
pH	8.5		0.20	0.20	SU			06/08/18 16:28	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B18

Lab Sample ID: 500-146315-7

Date Collected: 06/01/18 09:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Acetone	0.023		0.015	0.0065	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Bromomethane	<0.0037	*	0.0037	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	06/01/18 17:41	06/08/18 17:18	1
4-Bromofluorobenzene (Surr)	111		75 - 131	06/01/18 17:41	06/08/18 17:18	1
Dibromofluoromethane	83		75 - 126	06/01/18 17:41	06/08/18 17:18	1
Toluene-d8 (Surr)	98		75 - 124	06/01/18 17:41	06/08/18 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B18

Lab Sample ID: 500-146315-7

Date Collected: 06/01/18 09:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Anthracene	0.0074	J	0.039	0.0065	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Benzo[a]anthracene	0.018	J *	0.039	0.0053	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Benzo[a]pyrene	0.029	J	0.039	0.0076	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Benzo[b]fluoranthene	0.043		0.039	0.0084	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Benzo[g,h,i]perylene	0.013	J	0.039	0.013	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Benzo[k]fluoranthene	0.015	J	0.039	0.011	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Carbazole	<0.20	*	0.20	0.097	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Chrysene	0.027	J	0.039	0.011	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Dibenz(a,h)anthracene	0.010	J	0.039	0.0075	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Fluoranthene	0.038	J	0.039	0.0072	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B18

Lab Sample ID: 500-146315-7

Date Collected: 06/01/18 09:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.018	J	0.039	0.010	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Phenanthrene	0.034	J	0.039	0.0054	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Pyrene	0.038	J	0.039	0.0078	mg/Kg	☼	06/06/18 07:24	06/09/18 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		25 - 139				06/06/18 07:24	06/09/18 18:56	1
2-Fluorobiphenyl	81		44 - 121				06/06/18 07:24	06/09/18 18:56	1
2-Fluorophenol	103		46 - 133				06/06/18 07:24	06/09/18 18:56	1
Nitrobenzene-d5	81		41 - 120				06/06/18 07:24	06/09/18 18:56	1
Phenol-d5	100		46 - 125				06/06/18 07:24	06/09/18 18:56	1
Terphenyl-d14	105		35 - 160				06/06/18 07:24	06/09/18 18:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.1	0.22	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Arsenic	13		0.57	0.20	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Barium	34		0.57	0.065	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Beryllium	0.48		0.23	0.054	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Boron	7.4	B	2.9	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Cadmium	0.41	B	0.11	0.021	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Calcium	150000	B	110	19	mg/Kg	☼	06/05/18 17:50	06/06/18 23:06	10
Chromium	7.9		0.57	0.28	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Cobalt	5.7		0.29	0.075	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Copper	18		0.57	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Iron	22000	B	11	6.0	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Lead	22		0.29	0.13	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Magnesium	52000	B	5.7	2.8	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Manganese	490	B	0.57	0.083	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Nickel	15		0.57	0.17	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Potassium	1200		29	10	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Selenium	1.3	B	0.57	0.34	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Silver	0.18	J	0.29	0.074	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Sodium	1300		57	8.5	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Vanadium	11		0.29	0.068	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1
Zinc	65		1.1	0.50	mg/Kg	☼	06/05/18 17:50	06/06/18 12:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:25	06/08/18 14:29	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:29	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:25	06/08/18 14:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 14:29	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B18

Lab Sample ID: 500-146315-7

Date Collected: 06/01/18 09:35

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	6.2		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.029	J	0.050	0.010	mg/L		06/07/18 15:14	06/08/18 12:20	1
Barium	0.43	J	0.50	0.050	mg/L		06/07/18 15:14	06/08/18 12:20	1
Beryllium	0.0042		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 12:20	1
Boron	0.17		0.10	0.050	mg/L		06/07/18 15:14	06/08/18 12:20	1
Cadmium	0.0024	J	0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 12:20	1
Calcium	28		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:20	1
Chromium	0.11		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:20	1
Cobalt	0.035		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:20	1
Iron	120		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 12:20	1
Lead	0.13		0.0075	0.0075	mg/L		06/07/18 15:14	06/08/18 12:20	1
Manganese	0.98		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:20	1
Nickel	0.10		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:20	1
Potassium	30		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:20	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 12:20	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:20	1
Zinc	0.39	J	0.50	0.020	mg/L		06/07/18 15:14	06/08/18 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:25	06/11/18 13:52	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 20:08	1
Thallium	0.0022		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 20:08	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.018	0.0061	mg/Kg	☼	06/06/18 16:10	06/07/18 19:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.17	mg/Kg	☼	06/12/18 15:20	06/12/18 17:58	1
pH	8.5		0.20	0.20	SU			06/08/18 16:30	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B19

Lab Sample ID: 500-146315-8

Date Collected: 06/01/18 09:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
2-Butanone (MEK)	0.0043		0.0040	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Acetone	0.040		0.016	0.0069	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/01/18 17:41	06/08/18 17:44	1
4-Bromofluorobenzene (Surr)	107		75 - 131	06/01/18 17:41	06/08/18 17:44	1
Dibromofluoromethane	84		75 - 126	06/01/18 17:41	06/08/18 17:44	1
Toluene-d8 (Surr)	97		75 - 124	06/01/18 17:41	06/08/18 17:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B19

Lab Sample ID: 500-146315-8

Date Collected: 06/01/18 09:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2-Methylnaphthalene	0.037	J	0.075	0.0068	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Acenaphthylene	0.0075	J	0.037	0.0049	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Anthracene	0.015	J	0.037	0.0062	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Benzo[a]anthracene	0.050	*	0.037	0.0050	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Benzo[a]pyrene	0.053		0.037	0.0072	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Benzo[b]fluoranthene	0.087		0.037	0.0080	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Benzo[g,h,i]perylene	0.023	J	0.037	0.012	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Benzo[k]fluoranthene	0.031	J	0.037	0.011	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Carbazole	<0.19	*	0.19	0.093	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Chrysene	0.065		0.037	0.010	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Dibenz(a,h)anthracene	0.011	J	0.037	0.0072	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Fluoranthene	0.092		0.037	0.0069	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B19

Lab Sample ID: 500-146315-8

Date Collected: 06/01/18 09:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.026	J	0.037	0.0096	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Naphthalene	0.018	J	0.037	0.0057	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
N-Nitrosodiphenylamine	<0.19	*	0.19	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Phenanthrene	0.12		0.037	0.0052	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Pyrene	0.090		0.037	0.0074	mg/Kg	☼	06/06/18 07:24	06/09/18 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		25 - 139				06/06/18 07:24	06/09/18 19:22	1
2-Fluorobiphenyl	85		44 - 121				06/06/18 07:24	06/09/18 19:22	1
2-Fluorophenol	113		46 - 133				06/06/18 07:24	06/09/18 19:22	1
Nitrobenzene-d5	87		41 - 120				06/06/18 07:24	06/09/18 19:22	1
Phenol-d5	111		46 - 125				06/06/18 07:24	06/09/18 19:22	1
Terphenyl-d14	109		35 - 160				06/06/18 07:24	06/09/18 19:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	J	1.1	0.21	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Arsenic	11		0.54	0.19	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Barium	56		0.54	0.062	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Beryllium	0.69		0.22	0.051	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Boron	13	B	2.7	0.25	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Cadmium	0.49	B	0.11	0.019	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Calcium	88000	B	110	18	mg/Kg	☼	06/05/18 17:50	06/06/18 23:10	10
Chromium	8.7		0.54	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Cobalt	7.0		0.27	0.071	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Copper	23		0.54	0.15	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Iron	17000	B	11	5.6	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Lead	43		0.27	0.13	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Magnesium	36000	B	5.4	2.7	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Manganese	410	B	0.54	0.078	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Nickel	16		0.54	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Potassium	1100		27	9.6	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Selenium	1.1	B	0.54	0.32	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Silver	0.19	J	0.27	0.070	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Sodium	1500		54	8.0	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Vanadium	14		0.27	0.064	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1
Zinc	120		1.1	0.48	mg/Kg	☼	06/05/18 17:50	06/06/18 12:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:25	06/08/18 14:33	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:33	1
Iron	<0.40		0.40	0.20	mg/L		06/07/18 15:25	06/08/18 14:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 14:33	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B19

Lab Sample ID: 500-146315-8

Date Collected: 06/01/18 09:25

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	7.6		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:33	1
Nickel	0.028		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.047	J	0.050	0.010	mg/L		06/07/18 15:14	06/08/18 12:24	1
Barium	0.55		0.50	0.050	mg/L		06/07/18 15:14	06/08/18 12:24	1
Beryllium	0.0067		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 12:24	1
Boron	0.19		0.10	0.050	mg/L		06/07/18 15:14	06/08/18 12:24	1
Cadmium	0.0024	J	0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 12:24	1
Calcium	18		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:24	1
Chromium	0.14		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:24	1
Cobalt	0.045		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:24	1
Iron	150		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 12:24	1
Lead	0.30		0.0075	0.0075	mg/L		06/07/18 15:14	06/08/18 12:24	1
Manganese	1.4		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:24	1
Nickel	0.15		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:24	1
Potassium	32		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:24	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 12:24	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:24	1
Zinc	0.67		0.50	0.020	mg/L		06/07/18 15:14	06/08/18 12:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:25	06/11/18 13:56	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 20:12	1
Thallium	0.0027		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 20:12	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00025		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.019	0.0063	mg/Kg	☼	06/06/18 16:10	06/07/18 19:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	06/12/18 15:20	06/12/18 17:59	1
pH	8.2		0.20	0.20	SU			06/08/18 16:34	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B20

Lab Sample ID: 500-146315-9

Date Collected: 06/01/18 09:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Acetone	0.042		0.018	0.0080	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Bromomethane	<0.0046	*	0.0046	0.0017	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	06/01/18 17:41	06/08/18 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 134	06/01/18 17:41	06/08/18 18:10	1
4-Bromofluorobenzene (Surr)	105		75 - 131	06/01/18 17:41	06/08/18 18:10	1
Dibromofluoromethane	83		75 - 126	06/01/18 17:41	06/08/18 18:10	1
Toluene-d8 (Surr)	95		75 - 124	06/01/18 17:41	06/08/18 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B20

Lab Sample ID: 500-146315-9

Date Collected: 06/01/18 09:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Benzo[a]anthracene	0.013	J *	0.040	0.0055	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Benzo[a]pyrene	0.021	J	0.040	0.0079	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Benzo[b]fluoranthene	0.026	J	0.040	0.0088	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Carbazole	<0.20	*	0.20	0.10	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Chrysene	0.016	J	0.040	0.011	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Dibenz(a,h)anthracene	0.0088	J	0.040	0.0079	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Fluoranthene	0.029	J	0.040	0.0075	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B20

Lab Sample ID: 500-146315-9

Date Collected: 06/01/18 09:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.015	J	0.040	0.011	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.048	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Phenanthrene	0.013	J	0.040	0.0057	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Pyrene	0.023	J	0.040	0.0081	mg/Kg	☼	06/06/18 07:24	06/09/18 17:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		25 - 139				06/06/18 07:24	06/09/18 17:12	1
2-Fluorobiphenyl	80		44 - 121				06/06/18 07:24	06/09/18 17:12	1
2-Fluorophenol	107		46 - 133				06/06/18 07:24	06/09/18 17:12	1
Nitrobenzene-d5	80		41 - 120				06/06/18 07:24	06/09/18 17:12	1
Phenol-d5	101		46 - 125				06/06/18 07:24	06/09/18 17:12	1
Terphenyl-d14	93		35 - 160				06/06/18 07:24	06/09/18 17:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Arsenic	8.8		0.58	0.20	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Barium	68		0.58	0.067	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Beryllium	0.80		0.23	0.055	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Boron	5.4	B	2.9	0.27	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Cadmium	0.20	B	0.12	0.021	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Calcium	5100	B	12	2.0	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Chromium	19		0.58	0.29	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Cobalt	13		0.29	0.077	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Copper	22		0.58	0.16	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Iron	22000	B	12	6.1	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Lead	19		0.29	0.14	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Magnesium	5200	B	5.8	2.9	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Manganese	450	B	0.58	0.085	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Nickel	30		0.58	0.17	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Potassium	1700		29	10	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Selenium	1.7	B	0.58	0.34	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Silver	0.26	J	0.29	0.075	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Sodium	2100		58	8.7	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Vanadium	25		0.29	0.069	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1
Zinc	66		1.2	0.51	mg/Kg	☼	06/05/18 17:50	06/06/18 12:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/07/18 15:25	06/08/18 14:37	1
Chromium	<0.025		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:37	1
Iron	0.29	J	0.40	0.20	mg/L		06/07/18 15:25	06/08/18 14:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/07/18 15:25	06/08/18 14:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Client Sample ID: 1628V2-32-B20

Lab Sample ID: 500-146315-9

Date Collected: 06/01/18 09:20

Matrix: Solid

Date Received: 06/01/18 14:55

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.57		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:37	1
Nickel	<0.025		0.025	0.010	mg/L		06/07/18 15:25	06/08/18 14:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.024	J	0.050	0.010	mg/L		06/07/18 15:14	06/08/18 12:28	1
Barium	0.54		0.50	0.050	mg/L		06/07/18 15:14	06/08/18 12:28	1
Beryllium	0.0068		0.0040	0.0040	mg/L		06/07/18 15:14	06/08/18 12:28	1
Boron	0.21		0.10	0.050	mg/L		06/07/18 15:14	06/08/18 12:28	1
Cadmium	0.0026	J	0.0050	0.0020	mg/L		06/07/18 15:14	06/08/18 12:28	1
Calcium	10		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:28	1
Chromium	0.16		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:28	1
Cobalt	0.032		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:28	1
Iron	140		0.40	0.20	mg/L		06/07/18 15:14	06/08/18 12:28	1
Lead	0.043		0.038	0.038	mg/L		06/07/18 15:14	06/08/18 18:59	5
Manganese	1.1		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:28	1
Nickel	0.16		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:28	1
Potassium	36		2.5	0.50	mg/L		06/07/18 15:14	06/08/18 12:28	1
Selenium	<0.050		0.050	0.020	mg/L		06/07/18 15:14	06/08/18 12:28	1
Silver	<0.025		0.025	0.010	mg/L		06/07/18 15:14	06/08/18 12:28	1
Zinc	0.46	J	0.50	0.020	mg/L		06/07/18 15:14	06/08/18 12:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/07/18 15:25	06/11/18 14:00	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/07/18 15:14	06/08/18 20:23	1
Thallium	0.0028		0.0020	0.0020	mg/L		06/07/18 15:14	06/08/18 20:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00034		0.00020	0.00020	mg/L		06/07/18 12:40	06/08/18 10:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.018	0.0060	mg/Kg	☼	06/06/18 16:10	06/07/18 19:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	06/12/18 15:20	06/12/18 17:59	1
pH	7.5		0.20	0.20	SU			06/08/18 16:36	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
*	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.
E	Result exceeded calibration range.
X	Surrogate is outside control limits

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146315-1

Laboratory: TestAmerica Chicago

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

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

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

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

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name: <u>I-80 WILL COUNTY</u>	COC No.: <u>2</u> of <u>3</u>
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>PT13184-006/AF7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>7B1</u>	Lab Job No.: <u>500-146315</u> Sample Temp: <u>(24)(22)</u> <u>(48)(36)(32)(51)</u>

Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES																
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization

Matrix Key:
 W: Water
 S: Soil
 SL: Sludge
 S: Sediment
 L: Leachate
 DW: Drinking Water
 OL: Oil
 O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
	1628V2-32-1310-2			S	X	X					X	X	X	X	X		
	1628V2-32-1310-3																
	1628V2-32-1311-1																
	1628V2-32-1311-2																
	1628V2-32-1311-3																
	1628V2-32-1312																
1	1628V2-32-1313	6-1-18	1045														TB 13
2	1628V2-32-1313 DUP		1050														↓
3	1628V2-32-1314-1		1030														
	1628V2-32-1314-2																
4	1628V2-32-1315-1		1015														TB 12



Relinquished by: <u>[Signature]</u>	Date/Time: <u>6-1-18 1400</u>	Received by: <u>[Signature]</u>	Date/Time: <u>6-1-18 1405</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>6-1-18 1455</u>	Received by: <u>[Signature]</u>	Date/Time: <u>6/1/18 1455</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name: <u>T-80 WILL COUNTY</u>	COC No.: <u>3</u> of <u>3</u>
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>PT13184-006/AE7-06A</u>	Lab Job No.: <u>500-146315</u>
		TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> Other <u>7 BD</u>	Sample Temp:
Special Instructions:		Analyses	

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.


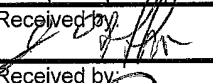
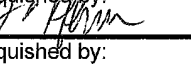
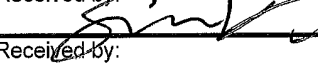
*** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization
	1628V2-32-B152	6-1-18		9	X	X					X	X	X	X	X	
5	1628V2-32-B16	6-1-18	1000													
6	1628V2-32-B17		0945													
7	1628V2-32-B18		0935													
8	1628V2-32-B19		0925													
9	1628V2-32-B20		0920													
10	1628V2-32-B21		0905													
11	1628V2-32-B21 DU		0910													
12	TRIP BLANK 13	6-1-18			X											
13	TRIP BLANK 14	6-1-18			X											

Matrix Key:

W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
	1628V2-32-B152	6-1-18		9	X	X					X	X	X	X	X		
5	1628V2-32-B16	6-1-18	1000														TB12
6	1628V2-32-B17		0945														
7	1628V2-32-B18		0935														
8	1628V2-32-B19		0925														
9	1628V2-32-B20		0920														
10	1628V2-32-B21		0905														
11	1628V2-32-B21 DU		0910														
12	TRIP BLANK 13	6-1-18			X												
13	TRIP BLANK 14	6-1-18			X												

Relinquished by: 	Date/Time: <u>6-1-18 1460</u>	Received by: 	Date/Time: <u>6-1-18 1405</u>
Relinquished by: 	Date/Time: <u>6-1-18 1455</u>	Received by: 	Date/Time: <u>06/01/18 1455</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

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: 500-146443-2
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/18/2018 1:49:16 PM

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

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

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

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-2

Client Sample ID: 1628V2-32-B12

Lab Sample ID: 500-146443-17

Date Collected: 06/04/18 08:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
1,1,2,2-Tetrachloroethane	<0.0016	*	0.0016	0.00050	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
2-Butanone (MEK)	0.0076		0.0039	0.0017	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
2-Hexanone	<0.0039	*	0.0039	0.0012	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
4-Methyl-2-pentanone (MIBK)	<0.0039	*	0.0039	0.0011	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Acetone	0.072		0.016	0.0068	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Bromomethane	<0.0039	*	0.0039	0.0015	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Chloroethane	<0.0039	*	0.0039	0.0011	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Chloromethane	<0.0039	*	0.0039	0.0016	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00054	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Trichloroethene	<0.0016		0.0016	0.00052	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Vinyl chloride	<0.0016	*	0.0016	0.00069	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	06/05/18 15:57	06/13/18 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	06/05/18 15:57	06/13/18 00:23	1
4-Bromofluorobenzene (Surr)	116		75 - 131	06/05/18 15:57	06/13/18 00:23	1
Dibromofluoromethane	81		75 - 126	06/05/18 15:57	06/13/18 00:23	1
Toluene-d8 (Surr)	100		75 - 124	06/05/18 15:57	06/13/18 00:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
1,3-Dichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.040	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-2

Client Sample ID: 1628V2-32-B12

Lab Sample ID: 500-146443-17

Date Collected: 06/04/18 08:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2,4-Dinitrotoluene	<0.18		0.18	0.055	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
2-Nitrophenol	<0.35		0.35	0.082	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
3 & 4 Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Anthracene	<0.035		0.035	0.0058	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Benzo[a]pyrene	<0.035		0.035	0.0068	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Benzo[b]fluoranthene	<0.035		0.035	0.0075	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.052	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Butyl benzyl phthalate	<0.18		0.18	0.066	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Carbazole	<0.18		0.18	0.087	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Chrysene	<0.035		0.035	0.0095	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0067	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Fluoranthene	0.014	J	0.035	0.0065	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-2

Client Sample ID: 1628V2-32-B12

Lab Sample ID: 500-146443-17

Date Collected: 06/04/18 08:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0090	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.043	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Phenanthrene	0.019	J	0.035	0.0049	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Phenol	<0.18		0.18	0.078	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Pyrene	0.020	J	0.035	0.0069	mg/Kg	☼	06/08/18 18:19	06/14/18 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		25 - 139				06/08/18 18:19	06/14/18 15:12	1
2-Fluorobiphenyl	80		44 - 121				06/08/18 18:19	06/14/18 15:12	1
2-Fluorophenol	99		46 - 133				06/08/18 18:19	06/14/18 15:12	1
Nitrobenzene-d5	80		41 - 120				06/08/18 18:19	06/14/18 15:12	1
Phenol-d5	96		46 - 125				06/08/18 18:19	06/14/18 15:12	1
Terphenyl-d14	113		35 - 160				06/08/18 18:19	06/14/18 15:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Arsenic	8.7		0.52	0.18	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Barium	28		0.52	0.059	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Beryllium	0.45		0.21	0.048	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Boron	8.4		2.6	0.24	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Cadmium	0.28	B	0.10	0.019	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Calcium	140000	B	100	18	mg/Kg	☼	06/07/18 17:02	06/12/18 01:00	10
Chromium	8.1		0.52	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Cobalt	5.7		0.26	0.068	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Copper	16		0.52	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Iron	16000		10	5.4	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Lead	18		0.26	0.12	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Magnesium	79000	B	52	26	mg/Kg	☼	06/07/18 17:02	06/12/18 01:00	10
Manganese	350	B	0.52	0.075	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Nickel	15		0.52	0.15	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Potassium	1300		26	9.2	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Selenium	0.88		0.52	0.31	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Silver	0.10	J	0.26	0.067	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Sodium	1500		52	7.7	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Vanadium	12		0.26	0.061	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1
Zinc	50		1.0	0.46	mg/Kg	☼	06/07/18 17:02	06/08/18 22:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 07:26	06/12/18 17:32	1
Chromium	<0.025		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 17:32	1
Iron	<0.40		0.40	0.20	mg/L		06/12/18 07:26	06/12/18 17:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 07:26	06/12/18 17:32	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-2

Client Sample ID: 1628V2-32-B12

Lab Sample ID: 500-146443-17

Date Collected: 06/04/18 08:50

Matrix: Solid

Date Received: 06/05/18 14:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	5.0		0.025	0.010	mg/L		06/12/18 07:26	06/12/18 17:32	1
Nickel	0.013	J	0.025	0.010	mg/L		06/12/18 07:26	06/12/18 17:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.031	J	0.050	0.010	mg/L		06/12/18 07:22	06/12/18 18:01	1
Barium	0.51		0.50	0.050	mg/L		06/12/18 07:22	06/12/18 18:01	1
Beryllium	0.0056		0.0040	0.0040	mg/L		06/12/18 07:22	06/12/18 18:01	1
Boron	0.21		0.10	0.050	mg/L		06/12/18 07:22	06/12/18 18:01	1
Cadmium	0.0032	J	0.0050	0.0020	mg/L		06/12/18 07:22	06/12/18 18:01	1
Calcium	30		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 18:01	1
Chromium	0.14		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 18:01	1
Cobalt	0.048		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 18:01	1
Iron	150		0.40	0.20	mg/L		06/12/18 07:22	06/12/18 18:01	1
Lead	0.16		0.0075	0.0075	mg/L		06/12/18 07:22	06/12/18 18:01	1
Manganese	1.3		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 18:01	1
Nickel	0.15		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 18:01	1
Potassium	41		2.5	0.50	mg/L		06/12/18 07:22	06/12/18 18:01	1
Selenium	<0.050		0.050	0.020	mg/L		06/12/18 07:22	06/12/18 18:01	1
Silver	<0.025		0.025	0.010	mg/L		06/12/18 07:22	06/12/18 18:01	1
Zinc	0.44	J	0.50	0.020	mg/L		06/12/18 07:22	06/12/18 18:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 07:26	06/13/18 14:41	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/12/18 07:22	06/12/18 15:55	1
Thallium	0.0036		0.0020	0.0020	mg/L		06/12/18 07:22	06/12/18 15:55	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020	0.00020	mg/L		06/11/18 13:25	06/12/18 11:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	B	0.018	0.0059	mg/Kg	☼	06/08/18 16:15	06/11/18 17:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.40		0.40	0.14	mg/Kg	☼	06/14/18 20:00	06/15/18 14:18	1
pH	8.7		0.20	0.20	SU			06/11/18 16:52	1

TestAmerica Chicago

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

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

Metals

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

General Chemistry

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146443-2

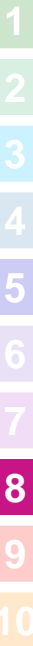
Laboratory: TestAmerica Chicago

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

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

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

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



CHAIN OF CUSTODY RECORD







Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>I-40 Will County</u> Project No.: <u>PTB 184-206/AE7-06A</u> TAT: <input type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input checked="" type="checkbox"/> 7BD Other Sampler: <u>ESP/CRM</u>	COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>500-146443</u> Sample Temp: <u>1.2-2.1</u> <u>0.8-2.3, 4.1, 3.6</u> Matrix Key: <u>2.2, 3.3</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds Class I Standard, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
17	1628V2-32-B12	6/4	850	S	X	X					X	X	X	X	X		6-4 TB15
18	1628V2-32-B11-1		915														0-8 TB15
19	1628V2-32-B11-2		920														8-16 TB15
20	1628V2-32-B11-1		940														0-8 TB15
21	1628V2-32-B10-2		945														8-16 TB15
22	1628V2-1-634		1405	W	X	X					X		X	X			TB20
23	1628V2-1-608		1425	W	X	X					X		X	X			TB20
24	TRIP BLANK 18			W	X												
25	TRIP BLANK 18			S	X												
26	TRIP BLANK 19			S	X												

Relinquished by: 	Date/Time: <u>6-5-18 1240</u>	Received by: 	Date/Time: <u>6/5/18 1240</u>
Relinquished by: 	Date/Time: <u>6/5/18 1400</u>	Received by: 	Date/Time: <u>6/5/18 1400</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:



Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange Office Phone Number, if available: _____

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

1300 block of West Lincoln Highway (Northeast Quadrant of the I-80 and US Route 30 Interchange)

City: New Lenox State: IL Zip Code: 60451

County: Will Township: New Lenox

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

Latitude: 41.52068 Longitude: -87.98982

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

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

Contact: Kristine A. Kutscher

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

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

Project Name: FAI 80 (I-80) and US Route 30 Interchange

Latitude: 41.52068 Longitude: -87.98982

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

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

LOCATIONS 1628V2-34-B01 THROUGH -B04 WERE SAMPLED ADJACENT TO SITE 1628V2-34 SEE TABLE 3i AND FIGURE 11 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-146242-7.

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

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

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

Company Name: Andrews Engineering, Inc.
 Street Address: 420 Eisenhower Lane North
 City: Lombard State: IL Zip Code: 60148
 Phone: 630-953-3332

Savo Radulovic
 Printed Name:

 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

July 16, 2018
 Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

ISGS Site 1628V2-34

Utility Corridor

Sample ID	1628V2-34-B01	1628V2-34-B02	1628V2-34-B03	1628V2-34-B04	Maximum Allowable Concentration				
Sample Depth (ft)	0-2	0-2	0-2	0-2					
Sample Date	5/31/2018	5/31/2018	5/31/2018	5/31/2018					
PID	0	0	0	0					
Sample pH	8.8	8.9	8	7.9					
Matrix	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)									
	0.19	1,2	0.58	1,2	0.079		ND		
Benzo(a)pyrene	0.19	1,2	0.58	1,2	0.079		ND		
Benzo(b)fluoranthene	0.41		1.2	1,2,3	0.11		ND		
	0.09	0.09	0.98	1.3	2.1				
	0.09	0.09	0.98	1.3	2.1				
	0.9	0.9	0.9	1.5	2.1				
	0.9	0.9	0.9	1.5	2.1				

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: 500-146242-7
Client Project/Site: IDOT - AE7-06

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey



Authorized for release by:
6/12/2018 4:57:09 PM

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

LINKS

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results through
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www.testamericainc.com

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B01

Lab Sample ID: 500-146242-16

Date Collected: 05/31/18 08:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0013		0.0013	0.00043	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
1,1,2,2-Tetrachloroethane	<0.0013		0.0013	0.00041	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
1,1,2-Trichloroethane	<0.0013		0.0013	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
1,1-Dichloroethane	<0.0013		0.0013	0.00044	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
1,1-Dichloroethene	<0.0013		0.0013	0.00044	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
1,2-Dichloroethane	<0.0032		0.0032	0.0010	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
1,2-Dichloropropane	<0.0013		0.0013	0.00033	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
1,3-Dichloropropene, Total	<0.0013		0.0013	0.00045	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
2-Butanone (MEK)	<0.0032		0.0032	0.0014	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
2-Hexanone	<0.0032		0.0032	0.0010	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
4-Methyl-2-pentanone (MIBK)	<0.0032		0.0032	0.00095	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Acetone	0.019		0.013	0.0056	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Benzene	<0.0013		0.0013	0.00033	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Bromodichloromethane	<0.0013		0.0013	0.00026	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Bromoform	<0.0013		0.0013	0.00038	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Bromomethane	<0.0032		0.0032	0.0012	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Carbon disulfide	<0.0032		0.0032	0.00067	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Carbon tetrachloride	<0.0013		0.0013	0.00037	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Chlorobenzene	<0.0013		0.0013	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Chloroethane	<0.0032		0.0032	0.00095	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Chloroform	<0.0013		0.0013	0.00045	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Chloromethane	<0.0032		0.0032	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
cis-1,2-Dichloroethene	<0.0013		0.0013	0.00036	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
cis-1,3-Dichloropropene	<0.0013		0.0013	0.00039	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Dibromochloromethane	<0.0013		0.0013	0.00042	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Ethylbenzene	<0.0013		0.0013	0.00062	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Methyl tert-butyl ether	<0.0013		0.0013	0.00038	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Methylene Chloride	<0.0032		0.0032	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Styrene	<0.0013		0.0013	0.00039	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Tetrachloroethene	<0.0013		0.0013	0.00044	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Toluene	<0.0013		0.0013	0.00033	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
trans-1,2-Dichloroethene	<0.0013		0.0013	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
trans-1,3-Dichloropropene	<0.0013		0.0013	0.00045	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Trichloroethene	<0.0013		0.0013	0.00044	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Vinyl chloride	<0.0013		0.0013	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1
Xylenes, Total	<0.0026		0.0026	0.00041	mg/Kg	☼	05/31/18 18:29	06/11/18 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	05/31/18 18:29	06/11/18 14:09	1
4-Bromofluorobenzene (Surr)	109		75 - 131	05/31/18 18:29	06/11/18 14:09	1
Dibromofluoromethane	82		75 - 126	05/31/18 18:29	06/11/18 14:09	1
Toluene-d8 (Surr)	98		75 - 124	05/31/18 18:29	06/11/18 14:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B01

Lab Sample ID: 500-146242-16

Date Collected: 05/31/18 08:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2-Methylnaphthalene	0.033	J	0.074	0.0068	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Acenaphthylene	0.047		0.037	0.0049	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Anthracene	0.050		0.037	0.0062	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Benzo[a]anthracene	0.17		0.037	0.0050	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Benzo[a]pyrene	0.19		0.037	0.0071	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Benzo[b]fluoranthene	0.41		0.037	0.0080	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Benzo[g,h,i]perylene	0.080		0.037	0.012	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Benzo[k]fluoranthene	0.13		0.037	0.011	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Chrysene	0.24		0.037	0.010	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Dibenz(a,h)anthracene	0.041		0.037	0.0071	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Fluoranthene	0.38		0.037	0.0068	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Fluorene	0.0057	J	0.037	0.0052	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B01

Lab Sample ID: 500-146242-16

Date Collected: 05/31/18 08:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.093		0.037	0.0096	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Naphthalene	0.022	J	0.037	0.0057	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Phenanthrene	0.13		0.037	0.0051	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Pyrene	0.35		0.037	0.0073	mg/Kg	☼	06/04/18 18:51	06/07/18 22:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		25 - 139				06/04/18 18:51	06/07/18 22:51	1
2-Fluorobiphenyl	86		44 - 121				06/04/18 18:51	06/07/18 22:51	1
2-Fluorophenol	138	X	46 - 133				06/04/18 18:51	06/07/18 22:51	1
Nitrobenzene-d5	85		41 - 120				06/04/18 18:51	06/07/18 22:51	1
Phenol-d5	131	X	46 - 125				06/04/18 18:51	06/07/18 22:51	1
Terphenyl-d14	110		35 - 160				06/04/18 18:51	06/07/18 22:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.21	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Arsenic	8.9		0.53	0.18	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Barium	66		0.53	0.060	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Beryllium	0.51		0.21	0.049	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Boron	10		2.6	0.25	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Cadmium	0.35	B	0.11	0.019	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Calcium	110000	B	53	9.0	mg/Kg	☼	06/01/18 07:27	06/05/18 02:40	5
Chromium	9.1		0.53	0.26	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Cobalt	4.6		0.26	0.069	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Copper	18		0.53	0.15	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Iron	23000		11	5.5	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Lead	31		0.26	0.12	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Magnesium	52000		5.3	2.6	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Manganese	500		0.53	0.077	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Nickel	14		0.53	0.15	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Potassium	1600		26	9.4	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Silver	<0.26		0.26	0.068	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Sodium	600		53	7.8	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Vanadium	12		0.26	0.062	mg/Kg	☼	06/01/18 07:27	06/01/18 21:38	1
Zinc	75	B	5.3	2.3	mg/Kg	☼	06/01/18 07:27	06/05/18 02:40	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 02:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 02:25	1
Manganese	1.1		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 02:25	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B01

Lab Sample ID: 500-146242-16

Date Collected: 05/31/18 08:50

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 88.5

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.012	J	0.050	0.010	mg/L		06/05/18 07:05	06/05/18 22:16	1
Barium	0.17	J	0.50	0.050	mg/L		06/05/18 07:05	06/05/18 22:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 07:05	06/05/18 22:16	1
Boron	0.11		0.10	0.050	mg/L		06/05/18 07:05	06/05/18 22:16	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L		06/05/18 07:05	06/05/18 22:16	1
Calcium	13		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:16	1
Chromium	0.056		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:16	1
Cobalt	0.013	J	0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:16	1
Iron	59		0.40	0.20	mg/L		06/05/18 07:05	06/05/18 22:16	1
Lead	0.030		0.0075	0.0075	mg/L		06/05/18 07:05	06/05/18 22:16	1
Manganese	0.59		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:16	1
Nickel	0.052		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:16	1
Potassium	13		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:16	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 07:05	06/05/18 22:16	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:16	1
Zinc	0.29	J	0.50	0.020	mg/L		06/05/18 07:05	06/05/18 22:16	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 07:05	06/05/18 18:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 07:05	06/05/18 18:14	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/05/18 13:15	06/06/18 11:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.018	0.0059	mg/Kg	☼	06/01/18 16:30	06/04/18 11:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	06/11/18 11:05	06/11/18 15:53	1
pH	8.8		0.20	0.20	SU			06/07/18 13:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B02

Lab Sample ID: 500-146242-17

Date Collected: 05/31/18 09:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Acetone	0.023		0.017	0.0074	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/31/18 18:29	06/11/18 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		70 - 134	05/31/18 18:29	06/11/18 14:35	1
4-Bromofluorobenzene (Surr)	110		75 - 131	05/31/18 18:29	06/11/18 14:35	1
Dibromofluoromethane	80		75 - 126	05/31/18 18:29	06/11/18 14:35	1
Toluene-d8 (Surr)	100		75 - 124	05/31/18 18:29	06/11/18 14:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B02

Lab Sample ID: 500-146242-17

Date Collected: 05/31/18 09:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2-Methylnaphthalene	0.016	J	0.072	0.0066	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Acenaphthene	0.014	J	0.036	0.0064	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Acenaphthylene	0.059		0.036	0.0047	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Anthracene	0.11		0.036	0.0060	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Benzo[a]anthracene	0.56		0.036	0.0048	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Benzo[a]pyrene	0.58		0.036	0.0069	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Benzo[b]fluoranthene	1.2		0.036	0.0077	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Benzo[g,h,i]perylene	0.25		0.036	0.012	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Benzo[k]fluoranthene	0.46		0.036	0.011	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Chrysene	0.66		0.036	0.0098	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Dibenz(a,h)anthracene	0.081		0.036	0.0069	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Fluoranthene	1.1		0.036	0.0066	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Fluorene	0.016	J	0.036	0.0050	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B02

Lab Sample ID: 500-146242-17

Date Collected: 05/31/18 09:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.24		0.036	0.0093	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Naphthalene	0.013	J	0.036	0.0055	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Pentachlorophenol	<0.72		0.72	0.58	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Phenanthrene	0.31		0.036	0.0050	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Pyrene	1.1		0.036	0.0071	mg/Kg	☼	06/04/18 18:51	06/07/18 23:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		25 - 139				06/04/18 18:51	06/07/18 23:20	1
2-Fluorobiphenyl	77		44 - 121				06/04/18 18:51	06/07/18 23:20	1
2-Fluorophenol	120		46 - 133				06/04/18 18:51	06/07/18 23:20	1
Nitrobenzene-d5	76		41 - 120				06/04/18 18:51	06/07/18 23:20	1
Phenol-d5	117		46 - 125				06/04/18 18:51	06/07/18 23:20	1
Terphenyl-d14	115		35 - 160				06/04/18 18:51	06/07/18 23:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.1	0.21	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Arsenic	5.2		0.53	0.18	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Barium	120		0.53	0.061	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Beryllium	0.50		0.21	0.050	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Boron	11		2.7	0.25	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Cadmium	0.31	B	0.11	0.019	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Calcium	120000	B	53	9.0	mg/Kg	☼	06/01/18 07:27	06/05/18 02:44	5
Chromium	12		0.53	0.26	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Cobalt	3.4		0.27	0.070	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Copper	15		0.53	0.15	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Iron	14000		11	5.5	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Lead	30		0.27	0.12	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Magnesium	70000		27	13	mg/Kg	☼	06/01/18 07:27	06/05/18 02:44	5
Manganese	390		0.53	0.077	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Nickel	9.3		0.53	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Potassium	1300		27	9.4	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Sodium	820		53	7.9	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Vanadium	11		0.27	0.063	mg/Kg	☼	06/01/18 07:27	06/01/18 21:42	1
Zinc	76	B	5.3	2.3	mg/Kg	☼	06/01/18 07:27	06/05/18 02:44	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 02:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 02:29	1
Manganese	1.1		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 02:29	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B02

Lab Sample ID: 500-146242-17

Date Collected: 05/31/18 09:00

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 89.0

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 07:05	06/05/18 22:20	1
Barium	0.10	J	0.50	0.050	mg/L		06/05/18 07:05	06/05/18 22:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 07:05	06/05/18 22:20	1
Boron	0.11		0.10	0.050	mg/L		06/05/18 07:05	06/05/18 22:20	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 07:05	06/05/18 22:20	1
Calcium	9.9		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:20	1
Chromium	0.051		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:20	1
Cobalt	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:20	1
Iron	48		0.40	0.20	mg/L		06/05/18 07:05	06/05/18 22:20	1
Lead	0.031		0.0075	0.0075	mg/L		06/05/18 07:05	06/05/18 22:20	1
Manganese	0.43		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:20	1
Nickel	0.040		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:20	1
Potassium	15		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:20	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 07:05	06/05/18 22:20	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:20	1
Zinc	0.17	J	0.50	0.020	mg/L		06/05/18 07:05	06/05/18 22:20	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 07:05	06/05/18 18:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 07:05	06/05/18 18:18	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/05/18 13:15	06/06/18 11:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.017	0.0055	mg/Kg	☼	06/01/18 16:30	06/04/18 11:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/11/18 11:05	06/11/18 15:53	1
pH	8.9		0.20	0.20	SU			06/07/18 13:57	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B03

Lab Sample ID: 500-146242-18

Date Collected: 05/31/18 09:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Acetone	0.014	J	0.015	0.0064	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/31/18 18:29	06/09/18 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		70 - 134	05/31/18 18:29	06/09/18 20:31	1
4-Bromofluorobenzene (Surr)	127		75 - 131	05/31/18 18:29	06/09/18 20:31	1
Dibromofluoromethane	115		75 - 126	05/31/18 18:29	06/09/18 20:31	1
Toluene-d8 (Surr)	113		75 - 124	05/31/18 18:29	06/09/18 20:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B03

Lab Sample ID: 500-146242-18

Date Collected: 05/31/18 09:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Acenaphthylene	0.0077	J	0.037	0.0049	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Anthracene	0.017	J	0.037	0.0062	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Benzo[a]anthracene	0.079		0.037	0.0050	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Benzo[a]pyrene	0.079		0.037	0.0072	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Benzo[b]fluoranthene	0.11		0.037	0.0080	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Benzo[g,h,i]perylene	0.041		0.037	0.012	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Benzo[k]fluoranthene	0.038		0.037	0.011	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Chrysene	0.095		0.037	0.010	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Fluoranthene	0.13		0.037	0.0069	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B03

Lab Sample ID: 500-146242-18

Date Collected: 05/31/18 09:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.043		0.037	0.0097	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Phenanthrene	0.051		0.037	0.0052	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Pyrene	0.12		0.037	0.0074	mg/Kg	☼	06/04/18 18:51	06/06/18 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	94		25 - 139				06/04/18 18:51	06/06/18 16:15	1
2-Fluorobiphenyl	83		44 - 121				06/04/18 18:51	06/06/18 16:15	1
2-Fluorophenol	102		46 - 133				06/04/18 18:51	06/06/18 16:15	1
Nitrobenzene-d5	75		41 - 120				06/04/18 18:51	06/06/18 16:15	1
Phenol-d5	91		46 - 125				06/04/18 18:51	06/06/18 16:15	1
Terphenyl-d14	104		35 - 160				06/04/18 18:51	06/06/18 16:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.1	0.22	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Arsenic	6.1		0.56	0.19	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Barium	78		0.56	0.064	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Beryllium	0.59		0.22	0.052	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Boron	6.2		2.8	0.26	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Cadmium	0.25	B	0.11	0.020	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Calcium	28000	B	11	1.9	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Chromium	11		0.56	0.28	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Cobalt	8.6		0.28	0.073	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Copper	12		0.56	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Iron	13000		11	5.8	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Lead	16		0.28	0.13	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Magnesium	18000		5.6	2.8	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Manganese	310		0.56	0.081	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Nickel	15		0.56	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Potassium	1200		28	9.9	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Silver	0.092	J	0.28	0.072	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Sodium	310		56	8.3	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Vanadium	21		0.28	0.066	mg/Kg	☼	06/01/18 07:27	06/01/18 21:46	1
Zinc	41	B	1.1	0.49	mg/Kg	☼	06/01/18 07:27	06/05/18 02:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 02:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 02:33	1
Manganese	6.3		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 02:33	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B03

Lab Sample ID: 500-146242-18

Date Collected: 05/31/18 09:15

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 87.5

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 07:05	06/05/18 22:24	1
Barium	0.27	J	0.50	0.050	mg/L		06/05/18 07:05	06/05/18 22:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 07:05	06/05/18 22:24	1
Boron	0.063	J	0.10	0.050	mg/L		06/05/18 07:05	06/05/18 22:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/05/18 07:05	06/05/18 22:24	1
Calcium	12		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:24	1
Chromium	0.046		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:24	1
Cobalt	0.011	J	0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:24	1
Iron	45		0.40	0.20	mg/L		06/05/18 07:05	06/05/18 22:24	1
Lead	0.030		0.0075	0.0075	mg/L		06/05/18 07:05	06/05/18 22:24	1
Manganese	0.46		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:24	1
Nickel	0.048		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:24	1
Potassium	6.3		2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:24	1
Selenium	<0.050		0.050	0.020	mg/L		06/05/18 07:05	06/05/18 22:24	1
Silver	<0.025		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:24	1
Zinc	0.16	J	0.50	0.020	mg/L		06/05/18 07:05	06/05/18 22:24	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		06/05/18 07:05	06/05/18 18:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 07:05	06/05/18 18:22	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		06/05/18 13:15	06/06/18 11:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.018	0.0061	mg/Kg	☼	06/01/18 16:30	06/04/18 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	06/11/18 11:05	06/11/18 15:53	1
pH	8.0		0.20	0.20	SU			06/07/18 14:01	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B04

Lab Sample ID: 500-146242-19

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Acetone	0.0089	J	0.018	0.0077	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	05/31/18 18:29	06/09/18 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	130		70 - 134	05/31/18 18:29	06/09/18 20:58	1
4-Bromofluorobenzene (Surr)	104		75 - 131	05/31/18 18:29	06/09/18 20:58	1
Dibromofluoromethane	104		75 - 126	05/31/18 18:29	06/09/18 20:58	1
Toluene-d8 (Surr)	109		75 - 124	05/31/18 18:29	06/09/18 20:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B04

Lab Sample ID: 500-146242-19

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B04

Lab Sample ID: 500-146242-19

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	06/04/18 18:51	06/06/18 15:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		25 - 139				06/04/18 18:51	06/06/18 15:20	1
2-Fluorobiphenyl	85		44 - 121				06/04/18 18:51	06/06/18 15:20	1
2-Fluorophenol	104		46 - 133				06/04/18 18:51	06/06/18 15:20	1
Nitrobenzene-d5	77		41 - 120				06/04/18 18:51	06/06/18 15:20	1
Phenol-d5	94		46 - 125				06/04/18 18:51	06/06/18 15:20	1
Terphenyl-d14	115		35 - 160				06/04/18 18:51	06/06/18 15:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Arsenic	11		0.55	0.19	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Barium	91		0.55	0.063	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Beryllium	0.86		0.22	0.052	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Boron	5.9		2.8	0.26	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Cadmium	0.27	B	0.11	0.020	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Calcium	800	B	11	1.9	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Chromium	18		0.55	0.27	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Cobalt	14		0.28	0.072	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Copper	21		0.55	0.15	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Iron	26000		11	5.7	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Lead	23		0.28	0.13	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Magnesium	2600		5.5	2.7	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Manganese	640		0.55	0.080	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Nickel	26		0.55	0.16	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Potassium	1400		28	9.8	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Selenium	1.2		0.55	0.32	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Silver	0.23	J	0.28	0.071	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Sodium	3500		55	8.2	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Vanadium	34		0.28	0.065	mg/Kg	☼	06/01/18 07:27	06/01/18 21:59	1
Zinc	65	B	1.1	0.49	mg/Kg	☼	06/01/18 07:27	06/05/18 02:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/05/18 07:11	06/06/18 02:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/05/18 07:11	06/06/18 02:37	1
Chromium	<0.025		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 02:37	1
Iron	<0.40		0.40	0.20	mg/L		06/05/18 07:11	06/06/18 02:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Client Sample ID: 1628V2-34-B04

Lab Sample ID: 500-146242-19

Date Collected: 05/31/18 09:10

Matrix: Solid

Date Received: 05/31/18 16:55

Percent Solids: 82.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/05/18 07:11	06/06/18 02:37	1
Manganese	0.043		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 02:37	1
Nickel	<0.025		0.025	0.010	mg/L		06/05/18 07:11	06/06/18 02:37	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.068		0.050	0.010	mg/L		06/05/18 07:05	06/05/18 22:28	1
Barium	0.56		0.50	0.050	mg/L		06/05/18 07:05	06/05/18 22:28	1
Beryllium	0.0059	F1	0.0040	0.0040	mg/L		06/05/18 07:05	06/05/18 22:28	1
Boron	0.098	J F1	0.10	0.050	mg/L		06/05/18 07:05	06/05/18 22:28	1
Cadmium	0.0022	J F1	0.0050	0.0020	mg/L		06/05/18 07:05	06/05/18 22:28	1
Calcium	6.9	F1	2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:28	1
Chromium	0.16		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:28	1
Cobalt	0.035	F1	0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:28	1
Iron	190		0.40	0.20	mg/L		06/05/18 07:05	06/05/18 22:28	1
Lead	0.10		0.0075	0.0075	mg/L		06/05/18 07:05	06/05/18 22:28	1
Manganese	1.5		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:28	1
Nickel	0.18		0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:28	1
Potassium	18	F1	2.5	0.50	mg/L		06/05/18 07:05	06/05/18 22:28	1
Selenium	<0.050	F1	0.050	0.020	mg/L		06/05/18 07:05	06/05/18 22:28	1
Silver	<0.025	F1	0.025	0.010	mg/L		06/05/18 07:05	06/05/18 22:28	1
Zinc	0.57		0.50	0.020	mg/L		06/05/18 07:05	06/05/18 22:28	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/05/18 07:11	06/06/18 19:36	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		06/05/18 07:05	06/05/18 18:34	1
Thallium	0.0026	F1	0.0020	0.0020	mg/L		06/05/18 07:05	06/05/18 18:34	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00054		0.00020	0.00020	mg/L		06/05/18 13:15	06/06/18 11:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.019	0.0063	mg/Kg	☼	06/01/18 16:30	06/04/18 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	06/11/18 11:05	06/11/18 15:54	1
pH	7.9		0.20	0.20	SU			06/07/18 14:06	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
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.
F1	MS and/or MSD Recovery 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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-06

TestAmerica Job ID: 500-146242-7

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

