



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

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: St. Charles Yard Team Section Headquarters (129) Office Phone Number, if available: _____

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

38 W 027 Route 38

City: St. Charles State: IL Zip Code: 60175

County: Kane Township: St. Charles

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

Latitude: 41.90221 Longitude: - 88.36088

(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: 0894835564 BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 1,952

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: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@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: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

LOCATIONS 129-B01, 129-B03, 129-B04, 129-B08, 129-B11, 129-B12, 129-B15, 129-B16, 129-B17, 129-B18, 129-B21, 129-B22, 129-B24, 129-B27, AND 129-B28 WERE SAMPLED AT THE ST. CHARLES YARD TEAM SECTION HEADQUARTERS (129). SEE TABLE 3 AND FIGURE 2 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: 500-158688-1 AND 500-158706-1

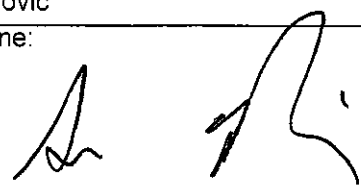
IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

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))

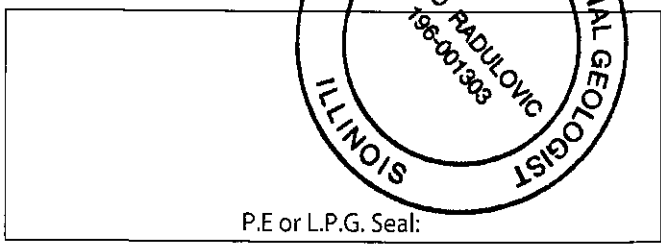
Company Name: Andrews Engineering, Inc.
Street Address: 420 Eisenhower Lane North
City: Lombard State: IL Zip Code: 60148
Phone: 630-953-3332

Savo Radulovic
Printed Name: _____



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Feb 27, 2020
Date:



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.

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
Chloride
Cyanide
Sulfate
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Chloride
Cyanide
Sulfate

IDOT Yard 129
 St. Charles Yard Team Section
 Headquarters

Sample ID	129-B01	129-B03	129-B04	129-B08	129-B11	129-B12	129-B15	129-B16	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6					
Sample Date	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/12/2019					
PID	0	0	0	0	0	0	0	0					
Sample pH	8.1	8.4	8.1	7.8	8.5	8.4	7.9	6.8					
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	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.													

Sample ID	129-B17	129-B18	129-B21	129-B22	129-B24	129-B27	129-B28	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	0-6	0-6	0-6	0-6	0-6	0-6					
Sample Date	2/12/2019	2/13/2019	2/13/2019	2/12/2019	2/13/2019	2/13/2019	2/12/2019					
PID	0	0	0	0	0	0	0					
Sample pH	8.1	7.3	7.2	8	8.6	7	7.1					
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	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.												

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-158688-1
Client Project/Site: IDOT - AE7-12A

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

Attn: Ms. Colleen Grey



Authorized for release by:
2/27/2019 3:53:38 PM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B01

Lab Sample ID: 500-158688-1

Date Collected: 02/12/19 11:20

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 80.1

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	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00088	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
1,2-Dichloropropane	<0.0020		0.0020	0.00053	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00072	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Acetone	<0.020		0.020	0.0089	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Bromodichloromethane	<0.0020		0.0020	0.00042	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Bromoform	<0.0020		0.0020	0.00060	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Chloroethane	<0.0051	*	0.0051	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Chloroform	<0.0020		0.0020	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00062	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Dibromochloromethane	<0.0020		0.0020	0.00067	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Ethylbenzene	<0.0020		0.0020	0.00098	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Styrene	<0.0020		0.0020	0.00062	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Tetrachloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Toluene	<0.0020		0.0020	0.00052	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00091	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00072	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	02/13/19 16:06	02/19/19 12:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	02/13/19 16:06	02/19/19 12:02	1
4-Bromofluorobenzene (Surr)	95		75 - 131	02/13/19 16:06	02/19/19 12:02	1
Dibromofluoromethane	96		75 - 126	02/13/19 16:06	02/19/19 12:02	1
Toluene-d8 (Surr)	95		75 - 124	02/13/19 16:06	02/19/19 12:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B01

Lab Sample ID: 500-158688-1

Date Collected: 02/12/19 11:20

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 80.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B01

Lab Sample ID: 500-158688-1

Date Collected: 02/12/19 11:20

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 80.1

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	<0.041		0.041	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	02/14/19 17:49	02/21/19 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		31 - 143	02/14/19 17:49	02/21/19 15:48	1
2-Fluorobiphenyl	77		43 - 145	02/14/19 17:49	02/21/19 15:48	1
2-Fluorophenol	117		31 - 166	02/14/19 17:49	02/21/19 15:48	1
Nitrobenzene-d5	83		37 - 147	02/14/19 17:49	02/21/19 15:48	1
Phenol-d5	109		30 - 153	02/14/19 17:49	02/21/19 15:48	1
Terphenyl-d14	77		42 - 157	02/14/19 17:49	02/21/19 15:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.84	J B	1.2	0.22	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Arsenic	10		0.58	0.20	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Barium	85		0.58	0.066	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Beryllium	0.70		0.23	0.054	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Boron	4.9		2.9	0.27	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Calcium	1900	B	12	2.0	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Chromium	16		0.58	0.29	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Cobalt	14		0.29	0.076	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Copper	23		0.58	0.16	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Iron	21000		12	6.0	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Lead	18		0.29	0.13	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Magnesium	3400		5.8	2.9	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Manganese	520		0.58	0.084	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Nickel	39		0.58	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Potassium	1600		29	10	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Selenium	0.39	J	0.58	0.34	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Silver	4.6		0.29	0.075	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Sodium	1700		58	8.6	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Thallium	3.7		0.58	0.29	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Vanadium	30		0.29	0.068	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	1
Zinc	88		1.2	0.51	mg/Kg	☼	02/15/19 08:32	02/22/19 22:22	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		02/16/19 14:18	02/22/19 16:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:18	02/22/19 16:55	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 16:55	1
Iron	<0.40		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 16:55	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B01
Date Collected: 02/12/19 11:20
Date Received: 02/13/19 14:05

Lab Sample ID: 500-158688-1
Matrix: Solid
Percent Solids: 80.1

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		02/16/19 14:18	02/22/19 16:55	1
Manganese	0.11		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 16:55	1
Nickel	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 16:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.089		0.050	0.010	mg/L		02/16/19 14:16	02/22/19 21:13	1
Barium	0.97		0.50	0.050	mg/L		02/16/19 14:16	02/22/19 21:13	1
Beryllium	0.0086		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 21:13	1
Boron	0.14		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 21:13	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 21:13	1
Calcium	13		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:13	1
Chromium	0.17		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:13	1
Cobalt	0.067		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:13	1
Iron	210		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 21:13	1
Lead	0.094		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 21:13	1
Manganese	1.8		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:13	1
Nickel	0.33		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:13	1
Potassium	34		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:13	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 21:13	1
Silver	0.029		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:13	1
Zinc	0.88	B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 21:13	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		02/16/19 14:18	02/22/19 21:23	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		02/16/19 14:16	02/21/19 13:24	1
Thallium	0.0088		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 13:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00035		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 07:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.020	0.0065	mg/Kg	☼	02/15/19 15:20	02/19/19 09:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	02/26/19 14:50	02/26/19 17:22	1
pH	8.1		0.2	0.2	SU			02/19/19 15:43	1
Chloride	1200		62	52	mg/Kg	☼	02/18/19 16:45	02/19/19 21:31	25
Sulfate	18		2.5	1.2	mg/Kg	☼	02/18/19 16:45	02/19/19 04:40	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B03

Lab Sample ID: 500-158688-3

Date Collected: 02/12/19 10:10

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0023		0.0023	0.00076	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00073	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00098	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
1,1-Dichloroethane	<0.0023		0.0023	0.00078	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
1,1-Dichloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
1,2-Dichloroethane	<0.0057		0.0057	0.0018	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
1,2-Dichloropropane	<0.0023		0.0023	0.00059	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00080	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
2-Butanone (MEK)	<0.0057		0.0057	0.0025	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
2-Hexanone	<0.0057		0.0057	0.0018	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
4-Methyl-2-pentanone (MIBK)	<0.0057		0.0057	0.0017	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Acetone	0.031		0.023	0.0099	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Benzene	<0.0023		0.0023	0.00058	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Bromodichloromethane	<0.0023		0.0023	0.00046	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Bromoform	<0.0023		0.0023	0.00066	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Bromomethane	<0.0057	*	0.0057	0.0021	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Carbon disulfide	<0.0057		0.0057	0.0012	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Carbon tetrachloride	<0.0023		0.0023	0.00066	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Chlorobenzene	<0.0023		0.0023	0.00084	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Chloroethane	<0.0057	*	0.0057	0.0017	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Chloroform	<0.0023		0.0023	0.00079	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Chloromethane	<0.0057		0.0057	0.0023	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
cis-1,2-Dichloroethene	0.00091	J	0.0023	0.00064	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00069	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Dibromochloromethane	<0.0023		0.0023	0.00074	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00067	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Methylene Chloride	0.0076		0.0057	0.0022	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Styrene	<0.0023		0.0023	0.00069	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Tetrachloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Toluene	<0.0023		0.0023	0.00057	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00080	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Trichloroethene	0.0015	J	0.0023	0.00077	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1
Xylenes, Total	<0.0045		0.0045	0.00073	mg/Kg	☼	02/13/19 16:06	02/18/19 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		70 - 134	02/13/19 16:06	02/18/19 21:11	1
4-Bromofluorobenzene (Surr)	94		75 - 131	02/13/19 16:06	02/18/19 21:11	1
Dibromofluoromethane	111		75 - 126	02/13/19 16:06	02/18/19 21:11	1
Toluene-d8 (Surr)	95		75 - 124	02/13/19 16:06	02/18/19 21:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B03

Lab Sample ID: 500-158688-3

Date Collected: 02/12/19 10:10

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B03

Lab Sample ID: 500-158688-3

Date Collected: 02/12/19 10:10

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.9

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	<0.041		0.041	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	02/14/19 17:49	02/21/19 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	59		31 - 143	02/14/19 17:49	02/21/19 16:46	1
2-Fluorobiphenyl	75		43 - 145	02/14/19 17:49	02/21/19 16:46	1
2-Fluorophenol	127		31 - 166	02/14/19 17:49	02/21/19 16:46	1
Nitrobenzene-d5	81		37 - 147	02/14/19 17:49	02/21/19 16:46	1
Phenol-d5	90		30 - 153	02/14/19 17:49	02/21/19 16:46	1
Terphenyl-d14	79		42 - 157	02/14/19 17:49	02/21/19 16:46	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	J B	1.2	0.24	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Arsenic	7.6		0.60	0.21	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Barium	120		0.60	0.069	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Beryllium	0.78		0.24	0.056	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Boron	4.4		3.0	0.28	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Cadmium	0.12	B	0.12	0.022	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Calcium	9800	B	12	2.0	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Chromium	21		0.60	0.30	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Cobalt	11		0.30	0.079	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Copper	24		0.60	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Iron	21000		12	6.3	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Lead	12		0.30	0.14	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Magnesium	8600		6.0	3.0	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Manganese	590		0.60	0.088	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Nickel	28		0.60	0.18	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Potassium	1300		30	11	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Selenium	<0.60		0.60	0.36	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Silver	3.8		0.30	0.078	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Sodium	1000		60	8.9	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Thallium	3.1		0.60	0.30	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Vanadium	38		0.30	0.071	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	1
Zinc	58		1.2	0.53	mg/Kg	☼	02/15/19 08:32	02/22/19 22:38	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		02/16/19 14:18	02/22/19 17:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:18	02/22/19 17:03	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:03	1
Iron	<0.40		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 17:03	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B03

Lab Sample ID: 500-158688-3

Date Collected: 02/12/19 10:10

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.9

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		02/16/19 14:18	02/22/19 17:03	1
Manganese	13		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:03	1
Nickel	0.088		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:03	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		02/16/19 14:16	02/22/19 21:21	1
Barium	1.2		0.50	0.050	mg/L		02/16/19 14:16	02/22/19 21:21	1
Beryllium	0.0090		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 21:21	1
Boron	0.13		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 21:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 21:21	1
Calcium	21		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:21	1
Chromium	0.20		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:21	1
Cobalt	0.077		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:21	1
Iron	220		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 21:21	1
Lead	0.097		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 21:21	1
Manganese	4.0		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:21	1
Nickel	0.31		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:21	1
Potassium	28		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:21	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 21:21	1
Silver	0.027		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:21	1
Zinc	0.69	B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 21:21	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		02/16/19 14:18	02/22/19 21:31	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		02/16/19 14:16	02/21/19 13:32	1
Thallium	0.0055		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 13:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00070		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 07:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.068		0.020	0.0068	mg/Kg	☼	02/15/19 15:20	02/19/19 09:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.61		0.61	0.21	mg/Kg	☼	02/26/19 14:50	02/26/19 17:23	1
pH	8.4		0.2	0.2	SU			02/19/19 15:50	1
Chloride	42		4.7	4.0	mg/Kg	☼	02/18/19 16:45	02/19/19 21:44	2
Sulfate	33		2.4	1.1	mg/Kg	☼	02/18/19 16:45	02/19/19 05:29	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B04

Lab Sample ID: 500-158688-4

Date Collected: 02/12/19 12:00

Matrix: Solid

Date Received: 02/13/19 14:05

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	<0.0019		0.0019	0.00064	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Acetone	0.041		0.019	0.0083	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Bromomethane	<0.0048	*	0.0048	0.0018	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Chloroethane	<0.0048	*	0.0048	0.0014	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
cis-1,2-Dichloroethene	0.00063	J	0.0019	0.00053	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Methylene Chloride	0.0047	J	0.0048	0.0019	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Trichloroethene	0.0011	J	0.0019	0.00064	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	02/13/19 16:06	02/18/19 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		70 - 134	02/13/19 16:06	02/18/19 21:36	1
4-Bromofluorobenzene (Surr)	96		75 - 131	02/13/19 16:06	02/18/19 21:36	1
Dibromofluoromethane	111		75 - 126	02/13/19 16:06	02/18/19 21:36	1
Toluene-d8 (Surr)	98		75 - 124	02/13/19 16:06	02/18/19 21:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B04

Lab Sample ID: 500-158688-4

Date Collected: 02/12/19 12:00

Matrix: Solid

Date Received: 02/13/19 14:05

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	<0.39		0.39	0.090	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2-Chlorophenol	<0.20	*	0.20	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2-Methylnaphthalene	0.031	J	0.079	0.0072	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Benzo[a]anthracene	0.013	J	0.039	0.0053	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Benzo[a]pyrene	0.012	J	0.039	0.0076	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Benzo[b]fluoranthene	0.020	J	0.039	0.0085	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Chrysene	0.017	J	0.039	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Fluoranthene	0.025	J	0.039	0.0073	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B04

Lab Sample ID: 500-158688-4

Date Collected: 02/12/19 12:00

Matrix: Solid

Date Received: 02/13/19 14:05

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	<0.039		0.039	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Naphthalene	0.014	J	0.039	0.0061	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Phenanthrene	0.029	J	0.039	0.0055	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1
Pyrene	0.021	J	0.039	0.0078	mg/Kg	☼	02/14/19 17:49	02/21/19 23:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		31 - 143	02/14/19 17:49	02/21/19 23:30	1
2-Fluorobiphenyl	77		43 - 145	02/14/19 17:49	02/21/19 23:30	1
2-Fluorophenol	130		31 - 166	02/14/19 17:49	02/21/19 23:30	1
Nitrobenzene-d5	84		37 - 147	02/14/19 17:49	02/21/19 23:30	1
Phenol-d5	118		30 - 153	02/14/19 17:49	02/21/19 23:30	1
Terphenyl-d14	79		42 - 157	02/14/19 17:49	02/21/19 23:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.86	J B	1.2	0.23	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Arsenic	8.4		0.58	0.20	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Barium	89		0.58	0.066	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Beryllium	0.65		0.23	0.054	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Boron	9.9		2.9	0.27	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Cadmium	0.26	B	0.12	0.021	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Calcium	30000	B	12	2.0	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Chromium	15		0.58	0.29	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Cobalt	12		0.29	0.076	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Copper	20		0.58	0.16	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Iron	17000		12	6.0	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Lead	37		0.29	0.13	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Magnesium	20000		5.8	2.9	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Manganese	480		0.58	0.084	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Nickel	25		0.58	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Potassium	2000		29	10	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Selenium	0.50	J	0.58	0.34	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Silver	3.0		0.29	0.075	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Sodium	1800		58	8.6	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Thallium	2.5		0.58	0.29	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Vanadium	28		0.29	0.069	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	1
Zinc	80		1.2	0.51	mg/Kg	☼	02/15/19 08:32	02/22/19 22:42	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		02/16/19 14:18	02/22/19 17:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:18	02/22/19 17:07	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:07	1
Iron	2.3		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 17:07	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B04

Lab Sample ID: 500-158688-4

Date Collected: 02/12/19 12:00

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.022		0.0075	0.0075	mg/L		02/16/19 14:18	02/22/19 17:07	1
Manganese	11		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:07	1
Nickel	0.063		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.064		0.050	0.010	mg/L		02/16/19 14:16	02/22/19 21:25	1
Barium	0.79		0.50	0.050	mg/L		02/16/19 14:16	02/22/19 21:25	1
Beryllium	0.0063		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 21:25	1
Boron	0.16		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 21:25	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 21:25	1
Calcium	21		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:25	1
Chromium	0.14		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:25	1
Cobalt	0.057		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:25	1
Iron	140		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 21:25	1
Lead	0.23		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 21:25	1
Manganese	1.3		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:25	1
Nickel	0.15		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:25	1
Potassium	28		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:25	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 21:25	1
Silver	0.013	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:25	1
Zinc	0.48	J B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 21:25	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		02/16/19 14:18	02/22/19 21:34	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		02/16/19 14:16	02/21/19 13:36	1
Thallium	0.0032		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 13:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 07:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.019	0.0064	mg/Kg	☼	02/15/19 15:20	02/19/19 09:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	02/26/19 14:50	02/26/19 17:23	1
pH	8.1		0.2	0.2	SU			02/19/19 15:53	1
Chloride	1500		120	99	mg/Kg	☼	02/23/19 12:00	02/25/19 13:50	50
Sulfate	39		2.3	1.1	mg/Kg	☼	02/23/19 12:00	02/23/19 14:20	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B08

Lab Sample ID: 500-158688-8

Date Collected: 02/12/19 10:50

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 88.2

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	☼	02/13/19 16:06	02/19/19 14:32	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Methylene Chloride	0.0041	J	0.0043	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	02/13/19 16:06	02/19/19 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	02/13/19 16:06	02/19/19 14:32	1
4-Bromofluorobenzene (Surr)	95		75 - 131	02/13/19 16:06	02/19/19 14:32	1
Dibromofluoromethane	93		75 - 126	02/13/19 16:06	02/19/19 14:32	1
Toluene-d8 (Surr)	96		75 - 124	02/13/19 16:06	02/19/19 14:32	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	☼	02/14/19 17:49	02/21/19 18:41	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B08

Lab Sample ID: 500-158688-8

Date Collected: 02/12/19 10:50

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2-Chlorophenol	<0.18	*	0.18	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Benzo[a]anthracene	<0.036		0.036	0.0048	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Benzo[a]pyrene	<0.036		0.036	0.0069	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Benzo[b]fluoranthene	<0.036		0.036	0.0077	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Chrysene	<0.036		0.036	0.0098	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B08

Lab Sample ID: 500-158688-8

Date Collected: 02/12/19 10:50

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 88.2

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	<0.036		0.036	0.0093	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Pentachlorophenol	<0.72		0.72	0.58	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1
Pyrene	<0.036		0.036	0.0071	mg/Kg	☼	02/14/19 17:49	02/21/19 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	53		31 - 143	02/14/19 17:49	02/21/19 18:41	1
2-Fluorobiphenyl	75		43 - 145	02/14/19 17:49	02/21/19 18:41	1
2-Fluorophenol	128		31 - 166	02/14/19 17:49	02/21/19 18:41	1
Nitrobenzene-d5	80		37 - 147	02/14/19 17:49	02/21/19 18:41	1
Phenol-d5	115		30 - 153	02/14/19 17:49	02/21/19 18:41	1
Terphenyl-d14	77		42 - 157	02/14/19 17:49	02/21/19 18:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J B	1.1	0.21	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Arsenic	8.2		0.54	0.18	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Barium	65		0.54	0.061	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Beryllium	0.53		0.21	0.050	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Boron	10		2.7	0.25	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Cadmium	0.24	B	0.11	0.019	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Calcium	85000	B	54	9.1	mg/Kg	☼	02/15/19 08:32	02/25/19 11:35	5
Chromium	13		0.54	0.27	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Cobalt	11		0.27	0.070	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Copper	19		0.54	0.15	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Iron	20000		11	5.6	mg/Kg	☼	02/15/19 08:32	02/25/19 11:31	1
Lead	13		0.27	0.12	mg/Kg	☼	02/15/19 08:32	02/25/19 11:31	1
Magnesium	44000		27	13	mg/Kg	☼	02/15/19 08:32	02/25/19 11:35	5
Manganese	380		0.54	0.078	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Nickel	27		0.54	0.16	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Potassium	1900		27	9.5	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Silver	2.2		0.27	0.069	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Sodium	1400		54	7.9	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Thallium	1.8		0.54	0.27	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Vanadium	18		0.27	0.063	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	1
Zinc	62		1.1	0.47	mg/Kg	☼	02/15/19 08:32	02/22/19 22:58	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		02/16/19 14:18	02/22/19 17:23	1
Manganese	3.3		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:23	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B08

Lab Sample ID: 500-158688-8

Date Collected: 02/12/19 10:50

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.014	J	0.050	0.010	mg/L		02/16/19 14:16	02/22/19 21:41	1
Barium	0.22	J	0.50	0.050	mg/L		02/16/19 14:16	02/22/19 21:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 21:41	1
Boron	0.11		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 21:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 21:41	1
Calcium	11		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:41	1
Chromium	0.043		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:41	1
Cobalt	0.010	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:41	1
Iron	40		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 21:41	1
Lead	0.0075		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 21:41	1
Manganese	0.29		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:41	1
Nickel	0.047		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:41	1
Potassium	16		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 21:41	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 21:41	1
Silver	<0.025		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 21:41	1
Zinc	0.14	J B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 21:41	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		02/16/19 14:16	02/21/19 13:51	1
Thallium	0.0020		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 13:51	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		02/21/19 10:35	02/22/19 08:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.017	0.0057	mg/Kg	☼	02/15/19 15:20	02/19/19 09:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	02/26/19 14:50	02/26/19 17:25	1
pH	7.8		0.2	0.2	SU			02/19/19 16:07	1
Chloride	1700		110	91	mg/Kg	☼	02/23/19 12:00	02/25/19 14:41	50
Sulfate	21		2.1	1.0	mg/Kg	☼	02/23/19 12:00	02/23/19 15:10	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B11

Lab Sample ID: 500-158688-12

Date Collected: 02/12/19 10:05

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.3

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	☼	02/13/19 16:06	02/19/19 16:12	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00094	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
1,1-Dichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00077	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
2-Butanone (MEK)	<0.0054		0.0054	0.0024	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Acetone	0.037		0.022	0.0095	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Benzene	<0.0022		0.0022	0.00056	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Bromoform	<0.0022		0.0022	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Bromomethane	<0.0054		0.0054	0.0021	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Chloroethane	<0.0054	*	0.0054	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Chloroform	<0.0022		0.0022	0.00076	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Methylene Chloride	0.0040	J	0.0054	0.0021	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00097	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00077	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Trichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1
Xylenes, Total	<0.0044		0.0044	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	02/13/19 16:06	02/19/19 16:12	1
4-Bromofluorobenzene (Surr)	95		75 - 131	02/13/19 16:06	02/19/19 16:12	1
Dibromofluoromethane	100		75 - 126	02/13/19 16:06	02/19/19 16:12	1
Toluene-d8 (Surr)	93		75 - 124	02/13/19 16:06	02/19/19 16:12	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	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B11

Lab Sample ID: 500-158688-12

Date Collected: 02/12/19 10:05

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B11

Date Collected: 02/12/19 10:05

Date Received: 02/13/19 14:05

Lab Sample ID: 500-158688-12

Matrix: Solid

Percent Solids: 78.3

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	<0.041		0.041	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	02/14/19 17:49	02/21/19 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		31 - 143	02/14/19 17:49	02/21/19 20:37	1
2-Fluorobiphenyl	78		43 - 145	02/14/19 17:49	02/21/19 20:37	1
2-Fluorophenol	130		31 - 166	02/14/19 17:49	02/21/19 20:37	1
Nitrobenzene-d5	84		37 - 147	02/14/19 17:49	02/21/19 20:37	1
Phenol-d5	122		30 - 153	02/14/19 17:49	02/21/19 20:37	1
Terphenyl-d14	78		42 - 157	02/14/19 17:49	02/21/19 20:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.4		2.4	0.46	mg/Kg	☼	02/15/19 08:32	02/25/19 11:43	2
Arsenic	7.6		0.59	0.20	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Barium	100		0.59	0.067	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Beryllium	0.74		0.24	0.055	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Boron	6.1		3.0	0.28	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Cadmium	0.091	J B	0.12	0.021	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Calcium	19000	B	12	2.0	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Chromium	21		0.59	0.29	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Cobalt	13		0.59	0.15	mg/Kg	☼	02/15/19 08:32	02/25/19 11:43	2
Copper	19		0.59	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Iron	20000		12	6.2	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Lead	16		0.30	0.14	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Magnesium	15000		5.9	2.9	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Manganese	510		0.59	0.086	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Nickel	23		0.59	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Potassium	1500		30	10	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Selenium	0.61		0.59	0.35	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Silver	4.4		0.30	0.076	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Sodium	2000		59	8.8	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1
Thallium	1.6		1.2	0.59	mg/Kg	☼	02/15/19 08:32	02/25/19 11:43	2
Vanadium	50		0.59	0.14	mg/Kg	☼	02/15/19 08:32	02/25/19 11:43	2
Zinc	55		1.2	0.52	mg/Kg	☼	02/15/19 08:32	02/22/19 23:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011	J	0.050	0.010	mg/L		02/16/19 14:18	02/22/19 17:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:18	02/22/19 17:48	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:48	1
Iron	3.7		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 17:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B11

Lab Sample ID: 500-158688-12

Date Collected: 02/12/19 10:05

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0095		0.0075	0.0075	mg/L		02/16/19 14:18	02/22/19 17:48	1
Manganese	8.0		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:48	1
Nickel	0.023	J	0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.089		0.050	0.010	mg/L		02/16/19 14:16	02/22/19 22:06	1
Barium	1.4		0.50	0.050	mg/L		02/16/19 14:16	02/22/19 22:06	1
Beryllium	0.011		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 22:06	1
Boron	0.11		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 22:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 22:06	1
Calcium	29		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:06	1
Chromium	0.27		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:06	1
Cobalt	0.079		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:06	1
Iron	280		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 22:06	1
Lead	0.14		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 22:06	1
Manganese	4.1		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:06	1
Nickel	0.23		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:06	1
Potassium	23		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:06	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 22:06	1
Silver	0.039		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:06	1
Zinc	0.66	B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 22:06	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		02/16/19 14:16	02/21/19 14:14	1
Thallium	0.0020		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 14:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00058		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 08:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.019	0.0065	mg/Kg	☼	02/15/19 15:20	02/19/19 10:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.63		0.63	0.22	mg/Kg	☼	02/26/19 14:50	02/26/19 17:26	1
pH	8.5		0.2	0.2	SU			02/19/19 16:21	1
Chloride	400		12	11	mg/Kg	☼	02/23/19 12:00	02/25/19 15:57	5
Sulfate	24		2.5	1.2	mg/Kg	☼	02/23/19 12:00	02/23/19 16:24	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B12

Lab Sample ID: 500-158688-13

Date Collected: 02/12/19 12:10

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 79.0

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	☼	02/13/19 16:06	02/19/19 16:36	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Acetone	0.014	J	0.020	0.0088	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Chloroethane	<0.0050	*	0.0050	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Methylene Chloride	0.0036	J	0.0050	0.0020	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	02/13/19 16:06	02/19/19 16:36	1
4-Bromofluorobenzene (Surr)	96		75 - 131	02/13/19 16:06	02/19/19 16:36	1
Dibromofluoromethane	94		75 - 126	02/13/19 16:06	02/19/19 16:36	1
Toluene-d8 (Surr)	95		75 - 124	02/13/19 16:06	02/19/19 16:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B12

Date Collected: 02/12/19 12:10

Date Received: 02/13/19 14:05

Lab Sample ID: 500-158688-13

Matrix: Solid

Percent Solids: 79.0

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	0.091	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2-Chlorophenol	<0.20	*	0.20	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B12

Date Collected: 02/12/19 12:10

Date Received: 02/13/19 14:05

Lab Sample ID: 500-158688-13

Matrix: Solid

Percent Solids: 79.0

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	☼	02/14/19 17:49	02/21/19 21:06	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 21:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		31 - 143	02/14/19 17:49	02/21/19 21:06	1
2-Fluorobiphenyl	74		43 - 145	02/14/19 17:49	02/21/19 21:06	1
2-Fluorophenol	125		31 - 166	02/14/19 17:49	02/21/19 21:06	1
Nitrobenzene-d5	82		37 - 147	02/14/19 17:49	02/21/19 21:06	1
Phenol-d5	113		30 - 153	02/14/19 17:49	02/21/19 21:06	1
Terphenyl-d14	77		42 - 157	02/14/19 17:49	02/21/19 21:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.65	J B	1.2	0.23	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Arsenic	6.1		0.59	0.20	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Barium	92		0.59	0.067	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Beryllium	0.64		0.24	0.055	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Boron	4.6		3.0	0.28	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Cadmium	0.17	B	0.12	0.021	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Calcium	2700	B	12	2.0	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Chromium	17		0.59	0.29	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Cobalt	11		0.30	0.077	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Copper	15		0.59	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Iron	17000		12	6.1	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Lead	13		0.30	0.14	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Magnesium	3100		5.9	2.9	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Manganese	350		0.59	0.086	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Nickel	24		0.59	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Potassium	1800		30	10	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Selenium	0.49	J	0.59	0.35	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Silver	4.2		0.30	0.076	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Sodium	930		59	8.7	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Thallium	3.1		0.59	0.29	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Vanadium	32		0.30	0.070	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	1
Zinc	62		1.2	0.52	mg/Kg	☼	02/15/19 08:32	02/22/19 23:26	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		02/16/19 14:18	02/22/19 17:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:18	02/22/19 17:52	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:52	1
Iron	<0.40		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 17:52	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B12

Lab Sample ID: 500-158688-13

Date Collected: 02/12/19 12:10

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 79.0

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		02/16/19 14:18	02/22/19 17:52	1
Manganese	3.6		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:52	1
Nickel	0.014	J	0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.084		0.050	0.010	mg/L		02/16/19 14:16	02/22/19 22:10	1
Barium	0.97		0.50	0.050	mg/L		02/16/19 14:16	02/22/19 22:10	1
Beryllium	0.0080		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 22:10	1
Boron	0.12		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 22:10	1
Cadmium	0.0025	J	0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 22:10	1
Calcium	25		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:10	1
Chromium	0.19		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:10	1
Cobalt	0.068		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:10	1
Iron	220		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 22:10	1
Lead	0.076		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 22:10	1
Manganese	1.4		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:10	1
Nickel	0.24		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:10	1
Potassium	32		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:10	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 22:10	1
Silver	0.020	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:10	1
Zinc	0.79	B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 22:10	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		02/16/19 14:18	02/22/19 22:08	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		02/16/19 14:16	02/21/19 14:17	1
Thallium	0.0042		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 14:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00059		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 08:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.021	0.0070	mg/Kg	☼	02/15/19 15:20	02/19/19 10:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	02/26/19 14:50	02/26/19 17:27	1
pH	8.4		0.2	0.2	SU			02/19/19 16:25	1
Chloride	320		12	10	mg/Kg	☼	02/23/19 12:00	02/25/19 16:10	5
Sulfate	18		2.4	1.2	mg/Kg	☼	02/23/19 12:00	02/23/19 16:36	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B15

Lab Sample ID: 500-158688-14

Date Collected: 02/12/19 10:30

Matrix: Solid

Date Received: 02/13/19 14:05

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	<0.0020		0.0020	0.00067	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Acetone	0.028		0.020	0.0086	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Chloroethane	<0.0050	*	0.0050	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Methylene Chloride	0.0036	J	0.0050	0.0020	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	02/13/19 16:06	02/19/19 17:01	1
4-Bromofluorobenzene (Surr)	97		75 - 131	02/13/19 16:06	02/19/19 17:01	1
Dibromofluoromethane	99		75 - 126	02/13/19 16:06	02/19/19 17:01	1
Toluene-d8 (Surr)	92		75 - 124	02/13/19 16:06	02/19/19 17:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B15

Lab Sample ID: 500-158688-14

Date Collected: 02/12/19 10:30

Matrix: Solid

Date Received: 02/13/19 14:05

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	<0.37		0.37	0.086	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2-Chlorophenol	<0.19	*	0.19	0.064	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2-Methylnaphthalene	0.012	J	0.076	0.0069	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Benzo[g,h,i]perylene	0.013	J	0.037	0.012	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Chrysene	0.013	J	0.037	0.010	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B15

Date Collected: 02/12/19 10:30

Date Received: 02/13/19 14:05

Lab Sample ID: 500-158688-14

Matrix: Solid

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	<0.037		0.037	0.0097	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Phenanthrene	0.0088	J	0.037	0.0052	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1
Pyrene	0.0084	J	0.037	0.0075	mg/Kg	☼	02/14/19 17:49	02/22/19 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		31 - 143	02/14/19 17:49	02/22/19 14:25	1
2-Fluorobiphenyl	74		43 - 145	02/14/19 17:49	02/22/19 14:25	1
2-Fluorophenol	119		31 - 166	02/14/19 17:49	02/22/19 14:25	1
Nitrobenzene-d5	79		37 - 147	02/14/19 17:49	02/22/19 14:25	1
Phenol-d5	109		30 - 153	02/14/19 17:49	02/22/19 14:25	1
Terphenyl-d14	78		42 - 157	02/14/19 17:49	02/22/19 14:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J B	1.1	0.22	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Arsenic	8.0		0.55	0.19	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Barium	55		0.55	0.063	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Beryllium	0.58		0.22	0.052	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Boron	10		2.8	0.26	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Cadmium	0.18	B	0.11	0.020	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Calcium	64000	B	55	9.4	mg/Kg	☼	02/15/19 08:32	02/25/19 11:51	5
Chromium	15		0.55	0.27	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Cobalt	11		0.28	0.073	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Copper	21		0.55	0.16	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Iron	18000		11	5.8	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Lead	18		0.28	0.13	mg/Kg	☼	02/15/19 08:32	02/25/19 11:47	1
Magnesium	28000		5.5	2.7	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Manganese	350		0.55	0.080	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Nickel	26		0.55	0.16	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Potassium	2200		28	9.8	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Selenium	0.53	J	0.55	0.33	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Silver	2.6		0.28	0.071	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Sodium	2000		55	8.2	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Thallium	2.2		0.55	0.28	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Vanadium	24		0.28	0.065	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	1
Zinc	66		1.1	0.49	mg/Kg	☼	02/15/19 08:32	02/22/19 23:30	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		02/16/19 14:18	02/22/19 17:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:18	02/22/19 17:56	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:56	1
Iron	<0.40		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 17:56	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B15

Lab Sample ID: 500-158688-14

Date Collected: 02/12/19 10:30

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 85.6

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		02/16/19 14:18	02/22/19 17:56	1
Manganese	5.6		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:56	1
Nickel	0.017	J	0.025	0.010	mg/L		02/16/19 14:18	02/22/19 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.062		0.050	0.010	mg/L		02/16/19 14:16	02/22/19 22:14	1
Barium	0.41	J	0.50	0.050	mg/L		02/16/19 14:16	02/22/19 22:14	1
Beryllium	0.0054		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 22:14	1
Boron	0.16		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 22:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 22:14	1
Calcium	21		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:14	1
Chromium	0.12		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:14	1
Cobalt	0.058		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:14	1
Iron	140		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 22:14	1
Lead	0.091		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 22:14	1
Manganese	1.2		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:14	1
Nickel	0.14		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:14	1
Potassium	35		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:14	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 22:14	1
Silver	<0.025		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:14	1
Zinc	0.42	J B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 22:14	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		02/16/19 14:18	02/22/19 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		02/16/19 14:16	02/21/19 14:21	1
Thallium	0.0024		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 08:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.018	0.0060	mg/Kg	☼	02/15/19 15:20	02/19/19 10:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	02/26/19 14:50	02/26/19 17:27	1
pH	7.9		0.2	0.2	SU			02/19/19 16:28	1
Chloride	2100		110	91	mg/Kg	☼	02/23/19 12:00	02/25/19 16:22	50
Sulfate	15		2.1	1.0	mg/Kg	☼	02/23/19 12:00	02/23/19 16:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B16

Lab Sample ID: 500-158688-15

Date Collected: 02/12/19 09:55

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 79.1

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	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Acetone	0.020		0.019	0.0084	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Chloroethane	<0.0048 *		0.0048	0.0014	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Methylene Chloride	0.0051		0.0048	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	02/13/19 16:06	02/19/19 17:26	1
4-Bromofluorobenzene (Surr)	96		75 - 131	02/13/19 16:06	02/19/19 17:26	1
Dibromofluoromethane	94		75 - 126	02/13/19 16:06	02/19/19 17:26	1
Toluene-d8 (Surr)	96		75 - 124	02/13/19 16:06	02/19/19 17:26	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	0.043	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B16

Lab Sample ID: 500-158688-15

Date Collected: 02/12/19 09:55

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2-Chlorophenol	<0.20	*	0.20	0.069	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B16

Lab Sample ID: 500-158688-15

Date Collected: 02/12/19 09:55

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 79.1

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	<0.040		0.040	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	02/14/19 17:49	02/21/19 22:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		31 - 143	02/14/19 17:49	02/21/19 22:04	1
2-Fluorobiphenyl	72		43 - 145	02/14/19 17:49	02/21/19 22:04	1
2-Fluorophenol	122		31 - 166	02/14/19 17:49	02/21/19 22:04	1
Nitrobenzene-d5	79		37 - 147	02/14/19 17:49	02/21/19 22:04	1
Phenol-d5	109		30 - 153	02/14/19 17:49	02/21/19 22:04	1
Terphenyl-d14	79		42 - 157	02/14/19 17:49	02/21/19 22:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.66	J	2.4	0.47	mg/Kg	☼	02/15/19 08:32	02/25/19 11:55	2
Arsenic	8.1		0.61	0.21	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Barium	130		0.61	0.070	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Beryllium	0.76		0.24	0.057	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Boron	5.1		3.1	0.28	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Cadmium	0.12	B	0.12	0.022	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Calcium	4100	B	12	2.1	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Chromium	22		0.61	0.30	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Cobalt	12		0.61	0.16	mg/Kg	☼	02/15/19 08:32	02/25/19 11:55	2
Copper	16		0.61	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Iron	21000		12	6.3	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Lead	17		0.31	0.14	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Magnesium	4900		6.1	3.0	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Manganese	600		0.61	0.088	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Nickel	22		0.61	0.18	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Potassium	1600		31	11	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Selenium	0.83		0.61	0.36	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Silver	4.2		0.31	0.079	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Sodium	880		61	9.0	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	1
Thallium	1.4		1.2	0.61	mg/Kg	☼	02/15/19 08:32	02/25/19 11:55	2
Vanadium	48		0.61	0.14	mg/Kg	☼	02/15/19 08:32	02/25/19 11:55	2
Zinc	63		1.2	0.54	mg/Kg	☼	02/15/19 08:32	02/22/19 23:34	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		02/16/19 14:18	02/22/19 18:00	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B16

Lab Sample ID: 500-158688-15

Date Collected: 02/12/19 09:55

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 79.1

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		02/16/19 14:16	02/22/19 22:18	1
Barium	0.12	J	0.50	0.050	mg/L		02/16/19 14:16	02/22/19 22:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 22:18	1
Boron	<0.10		0.10	0.050	mg/L		02/16/19 14:16	02/22/19 22:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 22:18	1
Calcium	9.2		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:18	1
Chromium	0.018	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:18	1
Cobalt	<0.025		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:18	1
Iron	16		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 22:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 22:18	1
Manganese	0.11		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:18	1
Nickel	0.013	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:18	1
Potassium	2.8		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:18	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 22:18	1
Silver	<0.025		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:18	1
Zinc	0.11	J B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 22:18	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		02/16/19 14:16	02/21/19 14:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 14:25	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		02/21/19 10:35	02/22/19 08:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.020	0.0066	mg/Kg	☼	02/15/19 15:20	02/19/19 10:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	02/26/19 14:50	02/26/19 17:27	1
pH	6.8		0.2	0.2	SU			02/19/19 16:35	1
Chloride	990		48	41	mg/Kg	☼	02/23/19 12:00	02/25/19 16:35	20
Sulfate	51		2.4	1.1	mg/Kg	☼	02/23/19 12:00	02/23/19 17:01	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B17

Lab Sample ID: 500-158688-16

Date Collected: 02/12/19 12:20

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 75.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0023		0.0023	0.00076	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00073	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00098	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
1,1-Dichloroethane	<0.0023		0.0023	0.00078	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
1,1-Dichloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
1,2-Dichloroethane	<0.0057		0.0057	0.0018	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
1,2-Dichloropropane	<0.0023		0.0023	0.00059	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00080	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
2-Butanone (MEK)	<0.0057		0.0057	0.0025	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
2-Hexanone	<0.0057		0.0057	0.0018	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
4-Methyl-2-pentanone (MIBK)	<0.0057		0.0057	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Acetone	0.043		0.023	0.0099	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Benzene	<0.0023		0.0023	0.00058	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Bromodichloromethane	<0.0023		0.0023	0.00046	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Bromoform	<0.0023		0.0023	0.00066	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Bromomethane	<0.0057		0.0057	0.0021	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Carbon disulfide	<0.0057		0.0057	0.0012	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Carbon tetrachloride	<0.0023		0.0023	0.00066	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Chlorobenzene	<0.0023		0.0023	0.00084	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Chloroethane	<0.0057 *		0.0057	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Chloroform	<0.0023		0.0023	0.00079	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Chloromethane	<0.0057		0.0057	0.0023	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00064	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Dibromochloromethane	<0.0023		0.0023	0.00074	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00067	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Methylene Chloride	<0.0057		0.0057	0.0022	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Styrene	<0.0023		0.0023	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Tetrachloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Toluene	<0.0023		0.0023	0.00057	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00080	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Trichloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1
Xylenes, Total	<0.0045		0.0045	0.00073	mg/Kg	☼	02/13/19 16:06	02/19/19 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	02/13/19 16:06	02/19/19 17:51	1
4-Bromofluorobenzene (Surr)	96		75 - 131	02/13/19 16:06	02/19/19 17:51	1
Dibromofluoromethane	96		75 - 126	02/13/19 16:06	02/19/19 17:51	1
Toluene-d8 (Surr)	95		75 - 124	02/13/19 16:06	02/19/19 17:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.22		0.22	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
1,4-Dichlorobenzene	<0.22		0.22	0.056	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B17

Lab Sample ID: 500-158688-16

Date Collected: 02/12/19 12:20

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 75.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.43		0.43	0.099	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2,4-Dinitrophenol	<0.88		0.88	0.77	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2,4-Dinitrotoluene	<0.22		0.22	0.069	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2,6-Dinitrotoluene	<0.22		0.22	0.085	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2-Chlorophenol	<0.22	*	0.22	0.074	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2-Methylnaphthalene	<0.088		0.088	0.0080	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2-Methylphenol	<0.22		0.22	0.070	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
3 & 4 Methylphenol	<0.22		0.22	0.072	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
4,6-Dinitro-2-methylphenol	<0.88		0.88	0.35	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
4-Chloroaniline	<0.88		0.88	0.20	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.051	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
4-Nitrophenol	<0.88		0.88	0.41	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Acenaphthene	<0.043		0.043	0.0078	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Acenaphthylene	<0.043		0.043	0.0057	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Anthracene	<0.043		0.043	0.0073	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Benzo[a]anthracene	<0.043		0.043	0.0058	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Benzo[a]pyrene	<0.043		0.043	0.0084	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Benzo[b]fluoranthene	<0.043		0.043	0.0094	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.079	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Butyl benzyl phthalate	<0.22		0.22	0.083	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Chrysene	<0.043		0.043	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0084	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Diethyl phthalate	<0.22		0.22	0.074	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Dimethyl phthalate	<0.22		0.22	0.057	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Di-n-octyl phthalate	<0.22		0.22	0.071	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Fluoranthene	0.010	J	0.043	0.0081	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Fluorene	<0.043		0.043	0.0061	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Hexachlorobenzene	<0.088		0.088	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Hexachlorocyclopentadiene	<0.88		0.88	0.25	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Hexachloroethane	<0.22		0.22	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B17

Date Collected: 02/12/19 12:20

Date Received: 02/13/19 14:05

Lab Sample ID: 500-158688-16

Matrix: Solid

Percent Solids: 75.7

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	<0.043		0.043	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Isophorone	<0.22		0.22	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Naphthalene	<0.043		0.043	0.0067	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
N-Nitrosodi-n-propylamine	<0.088		0.088	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Pentachlorophenol	<0.88		0.88	0.70	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Phenanthrene	0.033	J	0.043	0.0061	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Phenol	<0.22		0.22	0.097	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1
Pyrene	<0.043		0.043	0.0086	mg/Kg	☼	02/14/19 17:49	02/21/19 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		31 - 143	02/14/19 17:49	02/21/19 22:33	1
2-Fluorobiphenyl	70		43 - 145	02/14/19 17:49	02/21/19 22:33	1
2-Fluorophenol	124		31 - 166	02/14/19 17:49	02/21/19 22:33	1
Nitrobenzene-d5	80		37 - 147	02/14/19 17:49	02/21/19 22:33	1
Phenol-d5	115		30 - 153	02/14/19 17:49	02/21/19 22:33	1
Terphenyl-d14	75		42 - 157	02/14/19 17:49	02/21/19 22:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J B	1.2	0.24	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Arsenic	6.5		0.61	0.21	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Barium	140		0.61	0.070	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Beryllium	0.72		0.24	0.057	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Boron	5.0		3.1	0.28	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Cadmium	0.20	B	0.12	0.022	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Calcium	2400	B	12	2.1	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Chromium	19		0.61	0.30	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Cobalt	11		0.31	0.080	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Copper	15		0.61	0.17	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Iron	19000		12	6.4	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Lead	14		0.31	0.14	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Magnesium	2900		6.1	3.0	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Manganese	390		0.61	0.089	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Nickel	26		0.61	0.18	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Potassium	1700		31	11	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Selenium	0.67		0.61	0.36	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Silver	4.2		0.31	0.079	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Sodium	4600		61	9.0	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Thallium	3.1		0.61	0.30	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Vanadium	36		0.31	0.072	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	1
Zinc	65		1.2	0.54	mg/Kg	☼	02/15/19 08:32	02/22/19 23:38	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		02/16/19 14:18	02/22/19 18:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:18	02/22/19 18:04	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 18:04	1
Iron	3.5		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 18:04	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B17

Lab Sample ID: 500-158688-16

Date Collected: 02/12/19 12:20

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 75.7

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		02/16/19 14:18	02/22/19 18:04	1
Manganese	9.2		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 18:04	1
Nickel	0.048		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 18:04	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		02/16/19 14:16	02/22/19 22:22	1
Barium	1.1		0.50	0.050	mg/L		02/16/19 14:16	02/22/19 22:22	1
Beryllium	0.0064		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 22:22	1
Boron	0.093	J	0.10	0.050	mg/L		02/16/19 14:16	02/22/19 22:22	1
Cadmium	0.0028	J	0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 22:22	1
Calcium	14		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:22	1
Chromium	0.17		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:22	1
Cobalt	0.064		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:22	1
Iron	190		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 22:22	1
Lead	0.072		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 22:22	1
Manganese	1.9		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:22	1
Nickel	0.18		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:22	1
Potassium	19		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:22	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 22:22	1
Silver	0.013	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:22	1
Zinc	0.49	J B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 22:22	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		02/16/19 14:16	02/21/19 14:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00040		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 08:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048		0.021	0.0070	mg/Kg	☼	02/15/19 15:20	02/19/19 10:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	02/26/19 14:50	02/26/19 17:28	1
pH	8.1		0.2	0.2	SU			02/19/19 16:39	1
Chloride	2900		130	110	mg/Kg	☼	02/23/19 12:00	02/25/19 16:48	50
Sulfate	5.7		2.5	1.2	mg/Kg	☼	02/23/19 12:00	02/23/19 17:13	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B22

Lab Sample ID: 500-158688-17

Date Collected: 02/12/19 09:45

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 75.8

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	0.00081	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00078	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
1,1-Dichloroethane	<0.0024		0.0024	0.00083	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
1,1-Dichloroethene	<0.0024		0.0024	0.00083	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
1,2-Dichloroethane	<0.0061		0.0061	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
1,2-Dichloropropane	<0.0024		0.0024	0.00063	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00085	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
2-Butanone (MEK)	<0.0061		0.0061	0.0027	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
2-Hexanone	<0.0061		0.0061	0.0019	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
4-Methyl-2-pentanone (MIBK)	<0.0061		0.0061	0.0018	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Acetone	0.068		0.024	0.011	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Benzene	<0.0024		0.0024	0.00062	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Bromodichloromethane	<0.0024		0.0024	0.00049	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Bromoform	<0.0024		0.0024	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Bromomethane	<0.0061		0.0061	0.0023	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Carbon disulfide	<0.0061		0.0061	0.0013	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Carbon tetrachloride	<0.0024		0.0024	0.00070	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Chlorobenzene	<0.0024		0.0024	0.00090	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Chloroethane	<0.0061	*	0.0061	0.0018	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Chloroform	<0.0024		0.0024	0.00084	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Chloromethane	<0.0061		0.0061	0.0024	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00068	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00073	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Dibromochloromethane	<0.0024		0.0024	0.00079	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Ethylbenzene	<0.0024		0.0024	0.0012	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Methylene Chloride	0.0054	J	0.0061	0.0024	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Styrene	<0.0024		0.0024	0.00073	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Tetrachloroethene	<0.0024		0.0024	0.00083	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Toluene	<0.0024		0.0024	0.00061	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00085	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Trichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1
Xylenes, Total	<0.0049		0.0049	0.00078	mg/Kg	☼	02/13/19 16:06	02/19/19 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 134	02/13/19 16:06	02/19/19 18:15	1
4-Bromofluorobenzene (Surr)	98		75 - 131	02/13/19 16:06	02/19/19 18:15	1
Dibromofluoromethane	101		75 - 126	02/13/19 16:06	02/19/19 18:15	1
Toluene-d8 (Surr)	91		75 - 124	02/13/19 16:06	02/19/19 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B22

Lab Sample ID: 500-158688-17

Date Collected: 02/12/19 09:45

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 75.8

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	0.097	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2,4-Dinitrophenol	<0.85		0.85	0.75	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2-Chlorophenol	<0.21	*	0.21	0.072	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2-Methylnaphthalene	<0.085		0.085	0.0078	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Benzo[a]anthracene	0.0064	J	0.042	0.0057	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Benzo[b]fluoranthene	0.013	J	0.042	0.0091	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Chrysene	0.012	J	0.042	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Fluoranthene	0.017	J	0.042	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B22

Date Collected: 02/12/19 09:45

Date Received: 02/13/19 14:05

Lab Sample ID: 500-158688-17

Matrix: Solid

Percent Solids: 75.8

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	<0.042		0.042	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Naphthalene	0.0067	J	0.042	0.0065	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Phenanthrene	0.0090	J	0.042	0.0059	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1
Pyrene	0.013	J	0.042	0.0084	mg/Kg	☼	02/14/19 17:49	02/21/19 23:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		31 - 143	02/14/19 17:49	02/21/19 23:01	1
2-Fluorobiphenyl	73		43 - 145	02/14/19 17:49	02/21/19 23:01	1
2-Fluorophenol	129		31 - 166	02/14/19 17:49	02/21/19 23:01	1
Nitrobenzene-d5	83		37 - 147	02/14/19 17:49	02/21/19 23:01	1
Phenol-d5	119		30 - 153	02/14/19 17:49	02/21/19 23:01	1
Terphenyl-d14	81		42 - 157	02/14/19 17:49	02/21/19 23:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J B F1	1.3	0.25	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Arsenic	6.2		0.64	0.22	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Barium	120		0.64	0.073	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Beryllium	0.69		0.25	0.059	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Boron	6.8	F1	3.2	0.30	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Cadmium	0.29	B F1	0.13	0.023	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Calcium	4500	B	13	2.2	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Chromium	18		0.64	0.31	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Cobalt	8.0		0.32	0.083	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Copper	17	F1	0.64	0.18	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Iron	17000		13	6.6	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Lead	19		0.32	0.15	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Magnesium	3600		6.4	3.2	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Manganese	410		0.64	0.092	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Nickel	20		0.64	0.19	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Potassium	1800	F1	32	11	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Selenium	0.56	J F1	0.64	0.37	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Silver	3.9		0.32	0.082	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Sodium	1400		64	9.4	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Thallium	3.0		0.64	0.32	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Vanadium	31		0.32	0.075	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1
Zinc	75		1.3	0.56	mg/Kg	☼	02/15/19 08:32	02/22/19 23:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.1		0.40	0.20	mg/L	☼	02/16/19 14:18	02/22/19 18:08	1
Lead	<0.0075		0.0075	0.0075	mg/L	☼	02/16/19 14:18	02/22/19 18:08	1
Manganese	11		0.025	0.010	mg/L	☼	02/16/19 14:18	02/22/19 18:08	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B22

Lab Sample ID: 500-158688-17

Date Collected: 02/12/19 09:45

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 75.8

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		02/16/19 14:16	02/22/19 22:26	1
Barium	0.50		0.50	0.050	mg/L		02/16/19 14:16	02/22/19 22:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 22:26	1
Boron	0.083	J	0.10	0.050	mg/L		02/16/19 14:16	02/22/19 22:26	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 22:26	1
Calcium	11		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:26	1
Chromium	0.074		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:26	1
Cobalt	0.020	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:26	1
Iron	68		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 22:26	1
Lead	0.044		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 22:26	1
Manganese	1.1		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:26	1
Nickel	0.057		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:26	1
Potassium	11		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:26	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 22:26	1
Silver	<0.025		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:26	1
Zinc	0.46	J B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 22:26	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		02/16/19 14:16	02/21/19 14:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 14:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 08:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.021	0.0069	mg/Kg	☼	02/15/19 15:20	02/19/19 10:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.64		0.64	0.22	mg/Kg	☼	02/26/19 14:50	02/26/19 17:29	1
pH	8.0		0.2	0.2	SU			02/19/19 16:42	1
Chloride	470		26	22	mg/Kg	☼	02/23/19 12:00	02/25/19 17:00	10
Sulfate	11		2.6	1.2	mg/Kg	☼	02/23/19 12:00	02/23/19 17:26	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B28

Lab Sample ID: 500-158688-19

Date Collected: 02/12/19 09:35

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.6

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	0.00072	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
1,1-Dichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
1,1-Dichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
2-Butanone (MEK)	<0.0054		0.0054	0.0024	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Acetone	0.078		0.022	0.0094	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Bromoform	<0.0022		0.0022	0.00063	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Bromomethane	<0.0054		0.0054	0.0020	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Chloroethane	<0.0054	*	0.0054	0.0016	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00060	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00065	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00063	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Methylene Chloride	0.0051	J	0.0054	0.0021	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Styrene	<0.0022		0.0022	0.00065	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Tetrachloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Toluene	<0.0022		0.0022	0.00054	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Trichloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Vinyl chloride	<0.0022		0.0022	0.00095	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1
Xylenes, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	02/13/19 16:06	02/19/19 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	02/13/19 16:06	02/19/19 19:05	1
4-Bromofluorobenzene (Surr)	96		75 - 131	02/13/19 16:06	02/19/19 19:05	1
Dibromofluoromethane	95		75 - 126	02/13/19 16:06	02/19/19 19:05	1
Toluene-d8 (Surr)	95		75 - 124	02/13/19 16:06	02/19/19 19:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B28

Lab Sample ID: 500-158688-19

Date Collected: 02/12/19 09:35

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.6

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	0.091	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2-Chlorophenol	<0.20	*	0.20	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B28

Lab Sample ID: 500-158688-19

Date Collected: 02/12/19 09:35

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.6

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	0.010	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	02/14/19 17:49	02/21/19 21:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		31 - 143	02/14/19 17:49	02/21/19 21:35	1
2-Fluorobiphenyl	66		43 - 145	02/14/19 17:49	02/21/19 21:35	1
2-Fluorophenol	113		31 - 166	02/14/19 17:49	02/21/19 21:35	1
Nitrobenzene-d5	72		37 - 147	02/14/19 17:49	02/21/19 21:35	1
Phenol-d5	106		30 - 153	02/14/19 17:49	02/21/19 21:35	1
Terphenyl-d14	74		42 - 157	02/14/19 17:49	02/21/19 21:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J B	1.2	0.23	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Arsenic	8.0		0.60	0.21	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Barium	160		0.60	0.068	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Beryllium	0.78		0.24	0.056	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Boron	3.8		3.0	0.28	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Cadmium	0.12	B	0.12	0.022	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Calcium	4100	B	12	2.0	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Chromium	19		0.60	0.30	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Cobalt	14		0.30	0.079	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Copper	16		0.60	0.17	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Iron	19000		12	6.2	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Lead	16		0.30	0.14	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Magnesium	4400		6.0	3.0	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Manganese	630		0.60	0.087	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Nickel	22		0.60	0.17	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Potassium	1200		30	11	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Selenium	0.89		0.60	0.35	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Silver	4.1		0.30	0.077	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Sodium	2400		60	8.9	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Thallium	3.1		0.60	0.30	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Vanadium	37		0.30	0.071	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	1
Zinc	58		1.2	0.53	mg/Kg	☼	02/15/19 08:32	02/23/19 00:15	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		02/16/19 14:18	02/22/19 18:17	1
Chromium	<0.025		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 18:17	1
Iron	1.1		0.40	0.20	mg/L		02/16/19 14:18	02/22/19 18:17	1
Lead	0.012		0.0075	0.0075	mg/L		02/16/19 14:18	02/22/19 18:17	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

Client Sample ID: 129-B28

Lab Sample ID: 500-158688-19

Date Collected: 02/12/19 09:35

Matrix: Solid

Date Received: 02/13/19 14:05

Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	14		0.025	0.010	mg/L		02/16/19 14:18	02/22/19 18:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.036	J	0.050	0.010	mg/L		02/16/19 14:16	02/22/19 22:42	1
Barium	0.89	F1	0.50	0.050	mg/L		02/16/19 14:16	02/22/19 22:42	1
Beryllium	0.0042		0.0040	0.0040	mg/L		02/16/19 14:16	02/22/19 22:42	1
Boron	0.065	J	0.10	0.050	mg/L		02/16/19 14:16	02/22/19 22:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/16/19 14:16	02/22/19 22:42	1
Calcium	13		2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:42	1
Chromium	0.11		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:42	1
Cobalt	0.037		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:42	1
Iron	110		0.40	0.20	mg/L		02/16/19 14:16	02/22/19 22:42	1
Lead	0.041		0.0075	0.0075	mg/L		02/16/19 14:16	02/22/19 22:42	1
Manganese	2.7		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:42	1
Nickel	0.10		0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:42	1
Potassium	9.8	F1	2.5	0.50	mg/L		02/16/19 14:16	02/22/19 22:42	1
Selenium	<0.050		0.050	0.020	mg/L		02/16/19 14:16	02/22/19 22:42	1
Silver	0.012	J	0.025	0.010	mg/L		02/16/19 14:16	02/22/19 22:42	1
Zinc	0.40	J B	0.50	0.020	mg/L		02/16/19 14:16	02/22/19 22:42	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		02/16/19 14:16	02/21/19 14:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/16/19 14:16	02/21/19 14:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		02/21/19 10:35	02/22/19 08:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.020	0.0068	mg/Kg	☼	02/15/19 15:20	02/19/19 10:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	02/26/19 14:50	02/26/19 17:29	1
pH	7.1		0.2	0.2	SU			02/19/19 16:49	1
Chloride	2700		120	100	mg/Kg	☼	02/23/19 12:00	02/25/19 17:26	50
Sulfate	5.6		2.4	1.2	mg/Kg	☼	02/23/19 12:00	02/23/19 17:50	1

TestAmerica Chicago

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158688-1

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

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
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 - AE7-12A

TestAmerica Job ID: 500-158688-1

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 the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



CHAIN OF CUSTODY RECORD

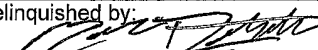



Client Contact Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	 500-158688 COC	Laboratory Lab: <i>Test America - Chicago</i> Address: <i>2417 Bond Street</i> <i>University Park, IL 60487</i> Phone: <i>708-534-5200</i> Contact: <i>Dick Wright</i> email: <i>dick.wright@testamerica.com</i>	Project Name: <i>Saint Charles, IL</i> Project No.: <i>PTB.184-006/AE7-012A</i> TAT: <input type="checkbox"/> 15 BD <input checked="" type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <i>Alex R. Pironen</i>	COC No.: <u>1</u> of <u>2</u> Lab Job No.: <i>500-158688</i> Sample Temp: <i>49.19, 3.3</i>
--	---	---	---	---

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.


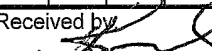

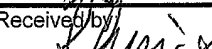
ANALYSES

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	Chloride Sulfate
1	129-B01	2/12/14	1120	S	X	X					X	X	X	X	X		X
2	129-B02		1110														
3	129-B03		1010														
4	129-B04		1200														
5	129-B05		1145														
6	129-B06		1130														
7	129-B07		1100														
8	129-B08		1050														
9	129-B09		1045														
10	129-B10		1015														
11	129-B10 Dup	V	1020	V													

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

Relinquished by: 	Date/Time: <i>2/13/14</i>	Received by: 	Date/Time: <i>2/13/14 1300</i>
Relinquished by: 	Date/Time: <i>2/13/14 1300</i>	Received by: 	Date/Time: <i>2/13/14 1405</i>
Relinquished by:	Date/Time:	Received by:	Date/Time:

CHAIN OF CUSTODY RECORD

Client Contact		Laboratory		Project Name: <u>Saint Charles, IL</u>				COC No.: <u>2</u> of <u>2</u>											
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com		Lab: <u>Test America - Chicago</u> Address: <u>2417 Bond Street</u> <u>University Park, IL 60487</u> Phone: <u>708-534-5200</u> Contact: <u>Dick Wright</u> email: <u>richard.wright@testamerica.com</u>		Project No.: <u>PTB 184-006/AE7-012A</u> TAT: <input type="checkbox"/> 15 BD <input checked="" type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other				Lab Job No.: <u>500-158688</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. <u>2/13/19 MAC</u>		ANALYSES				Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other													
								Comments											
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	Chloride Sulfate		
12	129-B11	2/12/19	1005	S	X	X					X	X	X	X	X		X		
13	129-B12		1210																
14	129-B15		1030																
15	129-B16		0955																
16	129-B17		1220																
17	129-B22		0945																
18	129-B23		1230																
19	129-B28		0935																
20	Trip Blank 1		1235																
	Trip Blank 2		1240																
	Trip Blank 3		1245																
Relinquished by: 		Date/Time: <u>2/12/19 1005</u>		Received by: 		Date/Time: <u>2/12/19 1300</u>		Relinquished by: 		Date/Time: <u>2/12/19 1405</u>		Received by: 		Date/Time: <u>2/13/19 1405</u>		Relinquished by:		Date/Time:	

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-158706-1
Client Project/Site: IDOT - AE7-12A

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

Attn: Ms. Colleen Grey



Authorized for release by:
3/4/2019 5:32:05 PM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B18

Lab Sample ID: 500-158706-3

Date Collected: 02/13/19 09:45

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 77.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2,4-Dinitrophenol	<0.86		0.86	0.75	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2,4-Dinitrotoluene	<0.21		0.21	0.068	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2,6-Dinitrotoluene	<0.21		0.21	0.084	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2-Chlorophenol	<0.21		0.21	0.073	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2-Methylnaphthalene	<0.086		0.086	0.0078	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
3 & 4 Methylphenol	5.2	E	0.21	0.071	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.060	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
4,6-Dinitro-2-methylphenol	<0.86		0.86	0.34	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
4-Chloro-3-methylphenol	<0.42		0.42	0.15	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.050	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
4-Nitrophenol	<0.86		0.86	0.41	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Acenaphthene	<0.042		0.042	0.0077	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Benzo[a]pyrene	0.037	J	0.042	0.0083	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Benzo[b]fluoranthene	0.035	J	0.042	0.0092	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Benzo[g,h,i]perylene	0.027	J	0.042	0.014	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Benzo[k]fluoranthene	<0.042		0.042	0.013	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.044	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.064	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.078	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Chrysene	<0.042		0.042	0.012	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Dimethyl phthalate	<0.21		0.21	0.056	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Di-n-octyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Fluoranthene	<0.042		0.042	0.0079	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Hexachlorobenzene	<0.086		0.086	0.0099	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Hexachlorocyclopentadiene	<0.86		0.86	0.25	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Hexachloroethane	<0.21		0.21	0.065	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B18

Lab Sample ID: 500-158706-3

Date Collected: 02/13/19 09:45

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 77.7

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	J	0.042	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Naphthalene	<0.042		0.042	0.0066	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Pentachlorophenol	<0.86		0.86	0.68	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Phenol	0.29		0.21	0.095	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1
Pyrene	<0.042		0.042	0.0085	mg/Kg	☼	02/15/19 08:38	02/21/19 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		31 - 143	02/15/19 08:38	02/21/19 14:34	1
2-Fluorobiphenyl	94		43 - 145	02/15/19 08:38	02/21/19 14:34	1
2-Fluorophenol	100		31 - 166	02/15/19 08:38	02/21/19 14:34	1
Nitrobenzene-d5	82		37 - 147	02/15/19 08:38	02/21/19 14:34	1
Phenol-d5	105		30 - 153	02/15/19 08:38	02/21/19 14:34	1
Terphenyl-d14	124		42 - 157	02/15/19 08:38	02/21/19 14:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.65	J	1.3	0.24	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Arsenic	6.7		0.63	0.22	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Barium	130		0.63	0.072	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Beryllium	0.76		0.25	0.059	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Boron	5.0		3.1	0.29	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Cadmium	0.15	B	0.13	0.023	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Calcium	3400		13	2.1	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Chromium	20		0.63	0.31	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Cobalt	9.9		0.31	0.082	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Copper	16		0.63	0.18	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Iron	18000		13	6.5	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Lead	18		0.31	0.15	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Magnesium	3100		6.3	3.1	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Manganese	490		0.63	0.091	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Nickel	22		0.63	0.18	mg/Kg	☼	02/14/19 16:18	02/20/19 21:47	1
Potassium	1800		31	11	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Selenium	0.55	J	0.63	0.37	mg/Kg	☼	02/14/19 16:18	02/20/19 21:47	1
Silver	3.8		0.31	0.081	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Sodium	5600		63	9.3	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Thallium	2.9		0.63	0.31	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Vanadium	35		0.31	0.074	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1
Zinc	78	B	1.3	0.55	mg/Kg	☼	02/14/19 16:18	02/20/19 00:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.8		0.40	0.20	mg/L		02/15/19 14:45	02/25/19 20:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/15/19 14:45	02/25/19 20:34	1
Manganese	10		0.025	0.010	mg/L		02/15/19 14:45	02/25/19 20:34	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B18

Lab Sample ID: 500-158706-3

Date Collected: 02/13/19 09:45

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 77.7

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	-	02/15/19 14:44	02/23/19 01:31	1
Barium	0.64		0.50	0.050	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Boron	0.078	J	0.10	0.050	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Cadmium	0.0024	J	0.0050	0.0020	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Calcium	10		2.5	0.50	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Chromium	0.089		0.025	0.010	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Cobalt	0.026		0.025	0.010	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Iron	87		0.40	0.20	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Lead	0.036		0.0075	0.0075	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Manganese	1.4		0.025	0.010	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Nickel	0.079		0.025	0.010	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Potassium	13		2.5	0.50	mg/L	-	02/15/19 14:44	02/25/19 23:22	1
Selenium	<0.050		0.050	0.020	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Silver	<0.025		0.025	0.010	mg/L	-	02/15/19 14:44	02/23/19 01:31	1
Zinc	0.32	J	0.50	0.020	mg/L	-	02/15/19 14:44	02/23/19 01:31	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	-	02/15/19 14:44	02/22/19 16:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	02/15/19 14:44	02/22/19 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L	-	02/19/19 10:40	02/20/19 09:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.019	0.0064	mg/Kg	☼	02/15/19 15:20	02/19/19 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	02/27/19 10:35	02/27/19 15:17	1
pH	7.3		0.2	0.2	SU	-		02/19/19 17:16	1
Chloride	4200		120	100	mg/Kg	☼	02/23/19 12:00	02/25/19 18:29	50
Sulfate	2.3	J	2.5	1.2	mg/Kg	☼	02/23/19 12:00	02/23/19 18:52	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		20	17	mg/L	-		03/02/19 17:39	100

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B24

Lab Sample ID: 500-158706-4

Date Collected: 02/13/19 10:05

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 93.7

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	0.00085	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00081	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
1,1-Dichloroethane	<0.0025		0.0025	0.00086	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
1,1-Dichloroethene	<0.0025		0.0025	0.00087	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
1,2-Dichloroethane	<0.0063		0.0063	0.0020	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
1,2-Dichloropropane	<0.0025		0.0025	0.00065	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
1,3-Dichloropropene, Total	<0.0025		0.0025	0.00089	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
2-Butanone (MEK)	<0.0063		0.0063	0.0028	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
2-Hexanone	<0.0063		0.0063	0.0020	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
4-Methyl-2-pentanone (MIBK)	<0.0063		0.0063	0.0019	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Acetone	0.018	J	0.025	0.011	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Benzene	<0.0025		0.0025	0.00064	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Bromodichloromethane	<0.0025		0.0025	0.00051	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Bromoform	<0.0025		0.0025	0.00074	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Bromomethane	<0.0063		0.0063	0.0024	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Carbon disulfide	<0.0063		0.0063	0.0013	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Carbon tetrachloride	<0.0025		0.0025	0.00073	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Chlorobenzene	<0.0025		0.0025	0.00093	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Chloroethane	<0.0063	*	0.0063	0.0019	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Chloroform	<0.0025		0.0025	0.00088	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Chloromethane	<0.0063		0.0063	0.0025	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00071	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00076	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Dibromochloromethane	<0.0025		0.0025	0.00083	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00074	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Methylene Chloride	0.0057	J	0.0063	0.0025	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Styrene	<0.0025		0.0025	0.00076	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Tetrachloroethene	<0.0025		0.0025	0.00086	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Toluene	<0.0025		0.0025	0.00064	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00089	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Trichloroethene	<0.0025		0.0025	0.00085	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1
Xylenes, Total	<0.0050		0.0050	0.00081	mg/Kg	☼	02/14/19 17:37	02/22/19 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	02/14/19 17:37	02/22/19 15:41	1
4-Bromofluorobenzene (Surr)	97		75 - 131	02/14/19 17:37	02/22/19 15:41	1
Dibromofluoromethane	93		75 - 126	02/14/19 17:37	02/22/19 15:41	1
Toluene-d8 (Surr)	98		75 - 124	02/14/19 17:37	02/22/19 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	<0.17		0.17	0.037	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
1,2-Dichlorobenzene	<0.17		0.17	0.042	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
1,4-Dichlorobenzene	<0.17		0.17	0.045	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B24

Lab Sample ID: 500-158706-4

Date Collected: 02/13/19 10:05

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 93.7

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	0.079	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
2-Nitrophenol	<0.35		0.35	0.082	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.041	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Acenaphthene	<0.035		0.035	0.0062	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Anthracene	<0.035		0.035	0.0058	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Benzo[a]pyrene	0.030	J	0.035	0.0067	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Benzo[b]fluoranthene	<0.035		0.035	0.0075	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Benzo[g,h,i]perylene	0.022	J	0.035	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.064	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Chrysene	<0.035		0.035	0.0095	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0067	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Fluoranthene	<0.035		0.035	0.0064	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Hexachlorobutadiene	<0.17		0.17	0.055	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B24

Lab Sample ID: 500-158706-4

Date Collected: 02/13/19 10:05

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 93.7

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	<0.035		0.035	0.0090	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Naphthalene	<0.035		0.035	0.0053	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Phenanthrene	0.0068	J	0.035	0.0048	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1
Pyrene	<0.035		0.035	0.0069	mg/Kg	☼	02/15/19 08:38	02/21/19 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		31 - 143	02/15/19 08:38	02/21/19 12:54	1
2-Fluorobiphenyl	108		43 - 145	02/15/19 08:38	02/21/19 12:54	1
2-Fluorophenol	100		31 - 166	02/15/19 08:38	02/21/19 12:54	1
Nitrobenzene-d5	99		37 - 147	02/15/19 08:38	02/21/19 12:54	1
Phenol-d5	111		30 - 153	02/15/19 08:38	02/21/19 12:54	1
Terphenyl-d14	137		42 - 157	02/15/19 08:38	02/21/19 12:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.0	0.20	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Arsenic	2.2		0.52	0.18	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Barium	2.7		0.52	0.059	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Beryllium	0.093	J	0.21	0.049	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Boron	2.9		2.6	0.24	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Cadmium	0.024	J B	0.10	0.019	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Calcium	390000		210	35	mg/Kg	☼	02/14/19 16:18	02/22/19 04:57	20
Chromium	2.5		0.52	0.26	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Cobalt	0.79		0.26	0.068	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Copper	1.7		0.52	0.15	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Iron	2600		10	5.4	mg/Kg	☼	02/14/19 16:18	02/20/19 21:51	1
Lead	2.3	J	2.6	1.2	mg/Kg	☼	02/14/19 16:18	02/20/19 21:56	10
Magnesium	61000		52	26	mg/Kg	☼	02/14/19 16:18	02/20/19 21:56	10
Manganese	160		0.52	0.075	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Nickel	<5.2		5.2	1.5	mg/Kg	☼	02/14/19 16:18	02/20/19 21:56	10
Potassium	440		26	9.2	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	02/14/19 16:18	02/20/19 21:51	1
Silver	0.31		0.26	0.067	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Sodium	140		52	7.7	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Vanadium	2.5		0.26	0.061	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	1
Zinc	14	B	1.0	0.46	mg/Kg	☼	02/14/19 16:18	02/20/19 00:25	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		02/15/19 14:44	02/23/19 01:35	1
Barium	<0.50		0.50	0.050	mg/L		02/15/19 14:44	02/23/19 01:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/15/19 14:44	02/23/19 01:35	1
Boron	<0.10		0.10	0.050	mg/L		02/15/19 14:44	02/23/19 01:35	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B24

Lab Sample ID: 500-158706-4

Date Collected: 02/13/19 10:05

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 93.7

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		02/15/19 14:44	02/23/19 01:35	1
Calcium	4.2		2.5	0.50	mg/L		02/15/19 14:44	02/23/19 01:35	1
Chromium	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:35	1
Cobalt	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:35	1
Iron	<0.40		0.40	0.20	mg/L		02/15/19 14:44	02/23/19 01:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/15/19 14:44	02/23/19 01:35	1
Manganese	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:35	1
Nickel	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:35	1
Potassium	<2.5		2.5	0.50	mg/L		02/15/19 14:44	02/25/19 23:27	1
Selenium	<0.050		0.050	0.020	mg/L		02/15/19 14:44	02/23/19 01:35	1
Silver	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:35	1
Zinc	<0.50		0.50	0.020	mg/L		02/15/19 14:44	02/23/19 01:35	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		02/15/19 14:44	02/22/19 16:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/15/19 14:44	02/22/19 16:29	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		02/19/19 10:40	02/20/19 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.017	0.0057	mg/Kg	☼	02/15/19 15:20	02/19/19 11:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	02/27/19 10:35	02/27/19 15:17	1
pH	8.6		0.2	0.2	SU			02/19/19 17:16	1
Chloride	15		2.0	1.7	mg/Kg	☼	02/23/19 12:00	02/23/19 19:04	1
Sulfate	21		2.0	0.97	mg/Kg	☼	02/23/19 12:00	02/23/19 19:04	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B27

Lab Sample ID: 500-158706-7

Date Collected: 02/13/19 10:30

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 78.6

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	☼	02/14/19 17:37	02/22/19 16:57	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00069	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
1,1-Dichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
1,1-Dichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
2-Butanone (MEK)	<0.0054		0.0054	0.0024	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Acetone	0.051		0.022	0.0094	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Bromoform	<0.0022		0.0022	0.00063	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Bromomethane	<0.0054		0.0054	0.0020	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Chloroethane	<0.0054	*	0.0054	0.0016	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00065	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Methylene Chloride	0.0035	J	0.0054	0.0021	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Styrene	<0.0022		0.0022	0.00065	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Trichloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1
Xylenes, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	02/14/19 17:37	02/22/19 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	02/14/19 17:37	02/22/19 16:57	1
4-Bromofluorobenzene (Surr)	95		75 - 131	02/14/19 17:37	02/22/19 16:57	1
Dibromofluoromethane	92		75 - 126	02/14/19 17:37	02/22/19 16:57	1
Toluene-d8 (Surr)	98		75 - 124	02/14/19 17:37	02/22/19 16:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B27

Lab Sample ID: 500-158706-7

Date Collected: 02/13/19 10:30

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B27

Lab Sample ID: 500-158706-7

Date Collected: 02/13/19 10:30

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 78.6

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	<0.042		0.042	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1
Pyrene	<0.042		0.042	0.0084	mg/Kg	☼	02/15/19 08:38	02/21/19 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		31 - 143	02/15/19 08:38	02/21/19 13:19	1
2-Fluorobiphenyl	79		43 - 145	02/15/19 08:38	02/21/19 13:19	1
2-Fluorophenol	83		31 - 166	02/15/19 08:38	02/21/19 13:19	1
Nitrobenzene-d5	72		37 - 147	02/15/19 08:38	02/21/19 13:19	1
Phenol-d5	92		30 - 153	02/15/19 08:38	02/21/19 13:19	1
Terphenyl-d14	136		42 - 157	02/15/19 08:38	02/21/19 13:19	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.2	0.23	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Arsenic	8.3		0.59	0.20	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Barium	120		0.59	0.068	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Beryllium	0.67		0.24	0.055	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Boron	3.7		3.0	0.28	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Cadmium	0.057	J B	0.12	0.021	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Calcium	1900		12	2.0	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Chromium	19		0.59	0.29	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Cobalt	11		0.30	0.078	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Copper	18		0.59	0.17	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Iron	20000		12	6.2	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Lead	14		0.30	0.14	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Magnesium	3400		5.9	2.9	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Manganese	430		0.59	0.086	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Nickel	30		0.59	0.17	mg/Kg	☼	02/14/19 16:18	02/20/19 22:16	1
Potassium	1100		30	11	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Selenium	0.48	J	0.59	0.35	mg/Kg	☼	02/14/19 16:18	02/20/19 22:16	1
Silver	4.1		0.30	0.077	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Sodium	4600		59	8.8	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Thallium	3.2		0.59	0.30	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Vanadium	33		0.30	0.070	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1
Zinc	58	B	1.2	0.52	mg/Kg	☼	02/14/19 16:18	02/20/19 00:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.21		0.20	0.20	mg/L		02/15/19 14:45	02/25/19 20:46	1
Manganese	9.7		0.025	0.010	mg/L		02/15/19 14:45	02/25/19 20:46	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B27

Lab Sample ID: 500-158706-7

Date Collected: 02/13/19 10:30

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 78.6

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		02/15/19 14:44	02/23/19 01:48	1
Barium	0.22	J	0.50	0.050	mg/L		02/15/19 14:44	02/23/19 01:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/15/19 14:44	02/23/19 01:48	1
Boron	<0.10		0.10	0.050	mg/L		02/15/19 14:44	02/23/19 01:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/15/19 14:44	02/23/19 01:48	1
Calcium	2.0	J	2.5	0.50	mg/L		02/15/19 14:44	02/23/19 01:48	1
Chromium	0.027		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:48	1
Cobalt	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:48	1
Iron	24		0.40	0.20	mg/L		02/15/19 14:44	02/23/19 01:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/15/19 14:44	02/23/19 01:48	1
Manganese	0.43		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:48	1
Nickel	0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:48	1
Potassium	3.9		2.5	0.50	mg/L		02/15/19 14:44	02/25/19 23:39	1
Selenium	<0.050		0.050	0.020	mg/L		02/15/19 14:44	02/23/19 01:48	1
Silver	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:48	1
Zinc	0.15	J	0.50	0.020	mg/L		02/15/19 14:44	02/23/19 01:48	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		02/15/19 14:44	02/22/19 16:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/15/19 14:44	02/22/19 16:41	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		02/19/19 10:40	02/20/19 09:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.020	0.0067	mg/Kg	☼	02/15/19 15:20	02/19/19 11:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.20	mg/Kg	☼	02/27/19 10:35	02/27/19 15:19	1
pH	7.0		0.2	0.2	SU			02/19/19 17:16	1
Chloride	1900		130	110	mg/Kg	☼	02/25/19 17:30	02/26/19 12:39	50
Sulfate	29		2.5	1.2	mg/Kg	☼	02/25/19 17:30	02/25/19 20:23	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B21

Lab Sample ID: 500-158706-8

Date Collected: 02/13/19 10:45

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 78.4

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	☼	02/14/19 17:37	02/22/19 17:23	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
1,2-Dichloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
2-Butanone (MEK)	0.012		0.0053	0.0023	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
2-Hexanone	<0.0053		0.0053	0.0016	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Acetone	0.056		0.021	0.0092	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Chlorobenzene	<0.0021		0.0021	0.00078	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Chloroethane	<0.0053	*	0.0053	0.0016	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Methylene Chloride	0.0036	J	0.0053	0.0021	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Tetrachloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	02/14/19 17:37	02/22/19 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	02/14/19 17:37	02/22/19 17:23	1
4-Bromofluorobenzene (Surr)	96		75 - 131	02/14/19 17:37	02/22/19 17:23	1
Dibromofluoromethane	97		75 - 126	02/14/19 17:37	02/22/19 17:23	1
Toluene-d8 (Surr)	95		75 - 124	02/14/19 17:37	02/22/19 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B21

Lab Sample ID: 500-158706-8

Date Collected: 02/13/19 10:45

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 78.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.095	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2,4-Dichlorophenol	<0.42		0.42	0.099	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2,4-Dinitrophenol	<0.84		0.84	0.74	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2-Methylnaphthalene	0.074	J	0.084	0.0077	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
4-Nitroaniline	<0.42		0.42	0.17	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Anthracene	0.010	J	0.042	0.0070	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Benzo[a]anthracene	0.017	J	0.042	0.0056	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Benzo[a]pyrene	0.045		0.042	0.0081	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Benzo[b]fluoranthene	0.047		0.042	0.0090	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Benzo[g,h,i]perylene	0.030	J	0.042	0.013	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Chrysene	0.022	J	0.042	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Dibenz(a,h)anthracene	0.032	J	0.042	0.0081	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Fluoranthene	0.027	J	0.042	0.0078	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B21

Lab Sample ID: 500-158706-8

Date Collected: 02/13/19 10:45

Matrix: Solid

Date Received: 02/14/19 08:00

Percent Solids: 78.4

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	0.036	J	0.042	0.011	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Naphthalene	0.024	J	0.042	0.0064	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Phenanthrene	0.076		0.042	0.0058	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1
Pyrene	0.030	J	0.042	0.0083	mg/Kg	☼	02/15/19 08:38	02/21/19 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		31 - 143	02/15/19 08:38	02/21/19 15:48	1
2-Fluorobiphenyl	78		43 - 145	02/15/19 08:38	02/21/19 15:48	1
2-Fluorophenol	79		31 - 166	02/15/19 08:38	02/21/19 15:48	1
Nitrobenzene-d5	66		37 - 147	02/15/19 08:38	02/21/19 15:48	1
Phenol-d5	90		30 - 153	02/15/19 08:38	02/21/19 15:48	1
Terphenyl-d14	128		42 - 157	02/15/19 08:38	02/21/19 15:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.2	0.23	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Arsenic	6.4		0.60	0.21	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Barium	110		0.60	0.069	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Beryllium	0.67		0.24	0.056	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Boron	8.7		3.0	0.28	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Cadmium	0.29	B	0.12	0.022	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Calcium	6900		12	2.0	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Chromium	17		0.60	0.30	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Cobalt	8.9		0.30	0.079	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Copper	15		0.60	0.17	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Iron	16000		12	6.3	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Lead	20		0.30	0.14	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Magnesium	4800		6.0	3.0	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Manganese	440		0.60	0.087	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Nickel	21		0.60	0.18	mg/Kg	☼	02/14/19 16:18	02/20/19 22:20	1
Potassium	1600		30	11	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Selenium	1.0		0.60	0.35	mg/Kg	☼	02/14/19 16:18	02/20/19 22:20	1
Silver	3.2		0.30	0.078	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Sodium	2400		60	8.9	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Thallium	2.8		0.60	0.30	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Vanadium	29		0.30	0.071	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1
Zinc	71	B	1.2	0.53	mg/Kg	☼	02/14/19 16:18	02/20/19 00:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.79		0.40	0.20	mg/L		02/15/19 14:45	02/25/19 20:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/15/19 14:45	02/25/19 20:50	1

TestAmerica Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

Client Sample ID: 129-B21
Date Collected: 02/13/19 10:45
Date Received: 02/14/19 08:00

Lab Sample ID: 500-158706-8
Matrix: Solid
Percent Solids: 78.4

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		02/15/19 14:44	02/23/19 01:52	1
Barium	0.26	J	0.50	0.050	mg/L		02/15/19 14:44	02/23/19 01:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/15/19 14:44	02/23/19 01:52	1
Boron	0.11		0.10	0.050	mg/L		02/15/19 14:44	02/23/19 01:52	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L		02/15/19 14:44	02/23/19 01:52	1
Calcium	9.7		2.5	0.50	mg/L		02/15/19 14:44	02/23/19 01:52	1
Chromium	0.031		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:52	1
Cobalt	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:52	1
Iron	27		0.40	0.20	mg/L		02/15/19 14:44	02/23/19 01:52	1
Lead	0.020		0.0075	0.0075	mg/L		02/15/19 14:44	02/23/19 01:52	1
Manganese	0.13		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:52	1
Nickel	0.024	J	0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:52	1
Potassium	6.9		2.5	0.50	mg/L		02/15/19 14:44	02/25/19 23:43	1
Selenium	<0.050		0.050	0.020	mg/L		02/15/19 14:44	02/23/19 01:52	1
Silver	<0.025		0.025	0.010	mg/L		02/15/19 14:44	02/23/19 01:52	1
Zinc	0.11	J	0.50	0.020	mg/L		02/15/19 14:44	02/23/19 01:52	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		02/15/19 14:44	02/22/19 16:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/15/19 14:44	02/22/19 16:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		02/19/19 10:40	02/20/19 09:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.019	0.0064	mg/Kg	☼	02/15/19 15:20	02/19/19 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	02/27/19 10:35	02/27/19 15:19	1
pH	7.2		0.2	0.2	SU			02/19/19 17:16	1
Chloride	2900		130	110	mg/Kg	☼	02/25/19 17:30	02/28/19 16:11	50
Sulfate	2.6		2.5	1.2	mg/Kg	☼	02/25/19 17:30	02/25/19 20:36	1

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-12A

TestAmerica Job ID: 500-158706-1

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 the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
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: <u>Test America - Chicago</u> Address: <u>2417 Bond Street</u> <u>University Park, IL 60487</u> Phone: <u>708-534-5200</u> Contact: <u>Dick Wright</u> email: <u>richard.wright@testamericainc.com</u>					Project Name: <u>Saint Charles, IL</u>					COC No.: <u>1</u> of <u>2</u>																																																																																																																																																																																																																																																					
										Project No.: <u>PTB 184-006 / AET-002A</u>					Lab Job No.: <u>500-158706</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. <u>Cl, SO4, MAC</u>					ANALYSES										Sample Temp: <u>21.15</u>																																																																																																																																																																																																																																																					
					<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Lab ID</th> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Matrix</th> <th>VOCs</th> <th>SVOCs</th> <th>BETX & MTBE</th> <th>PNAS</th> <th>Pesticides</th> <th>PCBs</th> <th>* Total Metals</th> <th>SPLP/** TCLP Metals</th> <th>*** Cyanide</th> <th>pH</th> <th>% Solids</th> <th>Waste Characterization</th> <th>Chloride Sulfate</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>129-B13</td> <td>2/13/19</td> <td>0925</td> <td>S</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>2</td> <td>129-B19</td> <td></td> <td>0935</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>129-B18</td> <td></td> <td>0945</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>129-B24</td> <td></td> <td>1005</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>129-B25</td> <td></td> <td>1015</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>129-B26</td> <td></td> <td>1025</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>129-B27</td> <td></td> <td>1030</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>129-B21</td> <td></td> <td>1045</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>9</td> <td>129-B20</td> <td></td> <td>1050</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>129-B20 DUP</td> <td></td> <td>1055</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>11</td> <td>TREP BLANK #2</td> <td></td> <td>1100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>129-B14</td> <td></td> <td>1100</td> <td>S</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> </tr> </tbody> </table>												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	Chloride Sulfate	Comments	1	129-B13	2/13/19	0925	S	X	X					X	X	X	X	X		X		2	129-B19		0935																3	129-B18		0945																4	129-B24		1005																5	129-B25		1015																6	129-B26		1025																7	129-B27		1030																8	129-B21		1045																9	129-B20		1050																10	129-B20 DUP		1055																11	TREP BLANK #2		1100																12	129-B14		1100	S	X	X					X	X	X	X	X
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	Chloride Sulfate	Comments																																																																																																																																																																																																																																																		
1	129-B13	2/13/19	0925	S	X	X					X	X	X	X	X		X																																																																																																																																																																																																																																																			
2	129-B19		0935																																																																																																																																																																																																																																																																	
3	129-B18		0945																																																																																																																																																																																																																																																																	
4	129-B24		1005																																																																																																																																																																																																																																																																	
5	129-B25		1015																																																																																																																																																																																																																																																																	
6	129-B26		1025																																																																																																																																																																																																																																																																	
7	129-B27		1030																																																																																																																																																																																																																																																																	
8	129-B21		1045																																																																																																																																																																																																																																																																	
9	129-B20		1050																																																																																																																																																																																																																																																																	
10	129-B20 DUP		1055																																																																																																																																																																																																																																																																	
11	TREP BLANK #2		1100																																																																																																																																																																																																																																																																	
12	129-B14		1100	S	X	X					X	X	X	X	X		X																																																																																																																																																																																																																																																			
Relinquished by: <u>[Signature]</u>					Date/Time: <u>02/14/19 0800</u>					Received by: <u>[Signature]</u>					Date/Time: <u>2/14/19 0800</u>																																																																																																																																																																																																																																																					
Relinquished by:					Date/Time:					Received by:					Date/Time:																																																																																																																																																																																																																																																					
Relinquished by:					Date/Time:					Received by:					Date/Time:																																																																																																																																																																																																																																																					