



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

8N518 South Sutton Road

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99629 Longitude: -88.20623
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 247

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 3222V-5-B01 AND 3222V-5-B02 WERE SAMPLED ADJACENT TO SITE 3222V-5. SEE TABLE 3a AND FIGURE 5 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBER: 500-172989-1

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

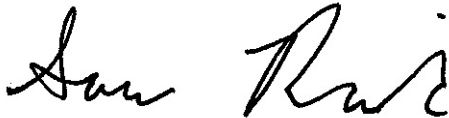
I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the 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:

Jan 12, 2022

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

ISGS Site 3222V-5

Residence

			Maximum Allowable Concentration				
Sample ID	3222V-5-B01	3222V-5-B02					
Sample Depth (ft)	0-3	0-3					
Sample Date	11/5/2019	11/5/2019					
PID	0	0	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area
Sample pH	8.7	8.1					
Matrix	Soil	Soil					
No Contaminants of Concern Noted.							

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172989-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/20/2019 4:42:57 PM

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

LINKS

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www.testamericainc.com

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B01

Lab Sample ID: 500-172989-1

Date Collected: 11/05/19 09:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Chloroethane	<0.0041 *		0.0041	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1
Xylenes, Total	0.00079	J	0.0033	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 00:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/06/19 19:45	11/16/19 00:36	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/06/19 19:45	11/16/19 00:36	1
Dibromofluoromethane	97		75 - 126	11/06/19 19:45	11/16/19 00:36	1
Toluene-d8 (Surr)	94		75 - 124	11/06/19 19:45	11/16/19 00:36	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	☼	11/17/19 14:28	11/19/19 16:10	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B01

Lab Sample ID: 500-172989-1

Date Collected: 11/05/19 09:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Acenaphthylene	0.013	J	0.039	0.0052	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Benzo[a]anthracene	0.0088	J	0.039	0.0053	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Benzo[a]pyrene	0.014	J	0.039	0.0076	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Benzo[g,h,i]perylene	0.019	J	0.039	0.013	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Chrysene	0.011	J	0.039	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Fluoranthene	0.013	J	0.039	0.0073	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B01

Lab Sample ID: 500-172989-1

Date Collected: 11/05/19 09:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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	0.014	J	0.039	0.010	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Phenanthrene	0.0093	J	0.039	0.0055	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Pyrene	0.014	J	0.039	0.0078	mg/Kg	☼	11/17/19 14:28	11/19/19 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	50		31 - 143				11/17/19 14:28	11/19/19 16:10	1
2-Fluorobiphenyl	78		43 - 145				11/17/19 14:28	11/19/19 16:10	1
2-Fluorophenol	92		31 - 166				11/17/19 14:28	11/19/19 16:10	1
Nitrobenzene-d5	72		37 - 147				11/17/19 14:28	11/19/19 16:10	1
Phenol-d5	86		30 - 153				11/17/19 14:28	11/19/19 16:10	1
Terphenyl-d14	85		42 - 157				11/17/19 14:28	11/19/19 16:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.2	0.23	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Arsenic	2.9		0.58	0.20	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Barium	26		0.58	0.066	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Beryllium	0.34		0.23	0.054	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Boron	15		2.9	0.27	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Cadmium	0.10	J B	0.12	0.021	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Calcium	160000	B	120	20	mg/Kg	☼	11/18/19 08:51	11/19/19 12:42	10
Chromium	6.1		0.58	0.29	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Cobalt	4.1		0.29	0.076	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Copper	5.7		0.58	0.16	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Iron	6600	B	12	6.1	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Lead	24		0.29	0.13	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Magnesium	98000		58	29	mg/Kg	☼	11/18/19 08:51	11/19/19 12:42	10
Manganese	460		0.58	0.084	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Nickel	8.4	B	0.58	0.17	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Potassium	1200		29	10	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Selenium	0.59		0.58	0.34	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Silver	1.4		0.29	0.075	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Sodium	380		58	8.6	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Vanadium	9.7		0.29	0.069	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	1
Zinc	22		1.2	0.51	mg/Kg	☼	11/18/19 08:51	11/18/19 18:34	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		11/14/19 15:55	11/15/19 21:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 21:42	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:42	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:42	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B01

Lab Sample ID: 500-172989-1

Date Collected: 11/05/19 09:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:42	1
Manganese	0.16		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:42	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.093		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:57	1
Barium	0.76		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:57	1
Beryllium	0.0077		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:57	1
Boron	0.17		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:57	1
Calcium	34		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:57	1
Chromium	0.18		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:57	1
Cobalt	0.063		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:57	1
Iron	220		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:57	1
Lead	0.22		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:57	1
Manganese	1.2		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:57	1
Nickel	0.22 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:57	1
Potassium	28		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:57	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:57	1
Silver	0.017 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:57	1
Zinc	0.67		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:55	11/19/19 04:34	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		11/08/19 15:37	11/14/19 17:16	1
Thallium	0.0040		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00037		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.018	0.0060	mg/Kg	☼	11/08/19 12:05	11/11/19 08:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	11/19/19 09:45	11/19/19 14:48	1
pH	8.7		0.2	0.2	SU			11/08/19 16:40	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B02

Lab Sample ID: 500-172989-2

Date Collected: 11/05/19 09:45

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Chloroethane	<0.0039 *		0.0039	0.0011	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 01:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/06/19 19:45	11/16/19 01:01	1
4-Bromofluorobenzene (Surr)	94		75 - 131	11/06/19 19:45	11/16/19 01:01	1
Dibromofluoromethane	95		75 - 126	11/06/19 19:45	11/16/19 01:01	1
Toluene-d8 (Surr)	96		75 - 124	11/06/19 19:45	11/16/19 01:01	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	☼	11/17/19 14:28	11/19/19 16:38	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B02

Lab Sample ID: 500-172989-2

Date Collected: 11/05/19 09:45

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2,4-Dinitrophenol	<0.78	F1 *	0.78	0.68	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2-Methylphenol	<0.19	F2	0.19	0.062	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Anthracene	0.0065	J	0.038	0.0064	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Benzo[a]anthracene	0.036	J	0.038	0.0052	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Benzo[a]pyrene	0.046		0.038	0.0074	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Benzo[b]fluoranthene	0.067		0.038	0.0083	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Benzo[g,h,i]perylene	0.028	J F1	0.038	0.012	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Benzo[k]fluoranthene	0.027	J	0.038	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Chrysene	0.046		0.038	0.010	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Dibenz(a,h)anthracene	<0.038	F1	0.038	0.0074	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Fluoranthene	0.070		0.038	0.0071	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Hexachlorocyclopentadiene	<0.78	F1	0.78	0.22	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Hexachloroethane	<0.19	F1	0.19	0.058	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B02

Lab Sample ID: 500-172989-2

Date Collected: 11/05/19 09:45

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.023	J F1	0.038	0.010	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Phenanthrene	0.028	J	0.038	0.0054	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Pyrene	0.063		0.038	0.0076	mg/Kg	☼	11/17/19 14:28	11/19/19 16:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	40		31 - 143				11/17/19 14:28	11/19/19 16:38	1
2-Fluorobiphenyl	68		43 - 145				11/17/19 14:28	11/19/19 16:38	1
2-Fluorophenol	78		31 - 166				11/17/19 14:28	11/19/19 16:38	1
Nitrobenzene-d5	57		37 - 147				11/17/19 14:28	11/19/19 16:38	1
Phenol-d5	71		30 - 153				11/17/19 14:28	11/19/19 16:38	1
Terphenyl-d14	81		42 - 157				11/17/19 14:28	11/19/19 16:38	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.1	0.22	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Arsenic	6.6		0.57	0.19	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Barium	62		0.57	0.065	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Beryllium	0.55		0.23	0.053	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Boron	11		2.8	0.26	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Cadmium	0.20	B	0.11	0.020	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Calcium	79000	B	110	19	mg/Kg	☼	11/18/19 08:51	11/19/19 12:46	10
Chromium	14		0.57	0.28	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Cobalt	9.8		0.28	0.074	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Copper	17		0.57	0.16	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Iron	18000	B	11	5.9	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Lead	17		0.28	0.13	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Magnesium	42000		57	28	mg/Kg	☼	11/18/19 08:51	11/19/19 12:46	10
Manganese	360		0.57	0.082	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Nickel	24	B	0.57	0.16	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Potassium	2400		28	10	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Selenium	1.1		0.57	0.33	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Silver	2.6		0.28	0.073	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Sodium	930		57	8.4	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Thallium	0.56	J	0.57	0.28	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Vanadium	21		0.28	0.067	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	1
Zinc	57		1.1	0.50	mg/Kg	☼	11/18/19 08:51	11/18/19 18:39	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		11/14/19 15:55	11/15/19 21:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 21:47	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:47	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

Client Sample ID: 3222V-5-B02

Lab Sample ID: 500-172989-2

Date Collected: 11/05/19 09:45

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:47	1
Manganese	1.7		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:47	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:47	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		11/08/19 15:37	11/12/19 15:05	1
Barium	0.70		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 15:05	1
Beryllium	0.0081		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 15:05	1
Boron	0.19		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 15:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 15:05	1
Calcium	39		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:05	1
Chromium	0.17		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:05	1
Cobalt	0.077		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:05	1
Iron	210		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 15:05	1
Lead	0.16		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 15:05	1
Manganese	1.2		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:05	1
Nickel	0.25 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:05	1
Potassium	33		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:05	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 15:05	1
Silver	0.017 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:05	1
Zinc	0.61		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 15:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:55	11/19/19 04:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:24	1
Thallium	0.0037		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00036		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017 J		0.018	0.0061	mg/Kg	☼	11/08/19 12:05	11/11/19 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	11/19/19 09:45	11/19/19 14:49	1
pH	8.1		0.2	0.2	SU			11/08/19 16:47	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172989-1

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 - AE7-029

Job ID: 500-172989-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

800 block of Wesr Bartlett Road (northeast corner of Bartlett Road and Sutton Road)

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99481 Longitude: - 88.20661
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 2,104

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 3222V-6-B01, -B02, -B03, -B05, -B06, -B07, -B08, -B09, -B10, -B11 AND -B12 WERE SAMPLED ADJACENT TO SITE 3222V-6. SEE TABLE 3b AND FIGURES 2 THROUGH 5 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-172892-1, 500-172992-1, AND 500-173122-1.

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

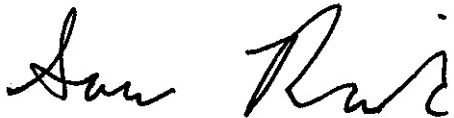
I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the 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:

Jan 12, 2022

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

ISGS Site 3222V-6
Vacant Land

Sample ID	3222V-6-B01-1	3222V-6-B01-2	3222V-6-B01-3	3222V-6-B01-4	3222V-6-B02	Maximum Allowable Concentration				
Sample Depth (ft)	0-5	5-10	10-15	15-20	0-4	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	11/4/2019	11/4/2019	11/4/2019	11/4/2019	11/5/2019					
PID	0	0	0	0	0					
Sample pH	7.3	7.7	7.9	8.6	8.3					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)anthracene	0.071	ND	ND	ND	J 0.017	0.9	0.9	0.9	1.1	1.8
Benzo(a)pyrene	0.097	1,2	ND	ND	J 0.02	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.16	ND	ND	J 0.01	J 0.026	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	J 0.015	ND	ND	ND	ND	0.09	0.09	0.15	0.2	0.42

Sample ID	3222V-6-B03	3222V-6-B05	3222V-6-B05 DUP	3222V-6-B06	3222V-6-B07	Maximum Allowable Concentration								
Sample Depth (ft)	0-4	0-4	0-4	0-4	0-4	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area				
Sample Date	11/6/2019	11/6/2019	11/6/2019	11/6/2019	11/6/2019									
PID	0	0	0	0	0									
Sample pH	8.1	7.4	7.6	8.2	8.1									
Matrix	Soil	Soil	Soil	Soil	Soil									
Semivolatile Organic Compounds (mg/kg)														
Benzo(a)anthracene	0.076	0.19	0.079	J 0.034	0.22	0.9	0.9	0.9	1.1	1.8				
Benzo(a)pyrene	0.12	1,2	0.32	1,2	0.11	1,2	0.044	0.42	1,2	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.19	0.4	0.13	J 0.033	0.53	0.9	0.9	0.9	1.5	2.1				
Dibenzo(a,h)anthracene	J 0.023	0.065	J 0.012	ND	J 0.032	0.09	0.09	0.15	0.2	0.42				

Sample ID	3222V-6-B08	3222V-6-B09-1	3222V-6-B09-2	3222V-6-B10-1	3222V-6-B10-2	Maximum Allowable Concentration				
Sample Depth (ft)	0-4	0-4	4-8	0-4	4-8	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	11/6/2019	11/4/2019	11/4/2019	11/4/2019	11/4/2019					
PID	0	0	0	0	0					
Sample pH	8.2	8.5	8.4	8.4	8.6					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)anthracene	J 0.032	J 0.027	ND	0.06	0.046	0.9	0.9	0.9	1.1	1.8
Benzo(a)pyrene	0.053	0.062	ND	0.082	0.058	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.052	0.079	ND	0.14	0.045	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	ND	J 0.016	ND	ND	ND	0.09	0.09	0.15	0.2	0.42

Sample ID	3222V-6-B11-1	3222V-6-B11-2	3222V-6-B12	3222V-6-B12 DUP	Maximum Allowable Concentration						
Sample Depth (ft)	0-4	4-8	0-2	0-2	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area		
Sample Date	11/4/2019	11/4/2019	11/4/2019	11/4/2019							
PID	0	0	0	0							
Sample pH	8.6	8.1	8.4	8.1							
Matrix	Soil	Soil	Soil	Soil							
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)anthracene	0.077	0.052	0.39	0.95	1,2,3	0.9	0.9	0.9	1.1	1.8	
Benzo(a)pyrene	0.086	0.058	0.47	1,2	1.1	1,2,3	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.12	0.041	0.85	1.7	1,2,3,4	0.9	0.9	0.9	1.5	2.1	
Dibenzo(a,h)anthracene	J 0.0095	ND	0.068	0.17	1,2,3	0.09	0.09	0.15	0.2	0.42	

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172892-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/19/2019 4:47:29 PM

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-1

Lab Sample ID: 500-172892-1

Date Collected: 11/04/19 15:10

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Chloroethane	<0.0042 *		0.0042	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 02:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/15/19 02:18	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/05/19 16:30	11/15/19 02:18	1
Dibromofluoromethane	93		75 - 126	11/05/19 16:30	11/15/19 02:18	1
Toluene-d8 (Surr)	95		75 - 124	11/05/19 16:30	11/15/19 02:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-1

Lab Sample ID: 500-172892-1

Date Collected: 11/04/19 15:10

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2,4-Dinitrophenol	<0.81	F1 *	0.81	0.71	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2-Methylnaphthalene	<0.081	F1 *	0.081	0.0074	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Acenaphthylene	0.030	J	0.040	0.0053	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Anthracene	0.0088	J	0.040	0.0067	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Benzo[a]anthracene	0.027	J	0.040	0.0054	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Benzo[a]pyrene	0.062	F1	0.040	0.0078	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Benzo[b]fluoranthene	0.079	F1 F2	0.040	0.0087	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Benzo[g,h,i]perylene	0.080	F1	0.040	0.013	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Benzo[k]fluoranthene	0.024	J F1	0.040	0.012	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Chrysene	0.037	J F1	0.040	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Dibenz(a,h)anthracene	0.016	J	0.040	0.0078	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Fluoranthene	0.041	F1 F2	0.040	0.0075	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Hexachlorocyclopentadiene	<0.81	F1	0.81	0.23	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Hexachloroethane	<0.20	F1	0.20	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-1

Lab Sample ID: 500-172892-1

Date Collected: 11/04/19 15:10

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.055	F1	0.040	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.048	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Phenanthrene	0.011	J	0.040	0.0056	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Pyrene	0.049	F1	0.040	0.0080	mg/Kg	☼	11/14/19 07:48	11/15/19 00:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	81		31 - 143				11/14/19 07:48	11/15/19 00:22	1
2-Fluorobiphenyl	90		43 - 145				11/14/19 07:48	11/15/19 00:22	1
2-Fluorophenol	92		31 - 166				11/14/19 07:48	11/15/19 00:22	1
Nitrobenzene-d5	76		37 - 147				11/14/19 07:48	11/15/19 00:22	1
Phenol-d5	80		30 - 153				11/14/19 07:48	11/15/19 00:22	1
Terphenyl-d14	98		42 - 157				11/14/19 07:48	11/15/19 00:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	1.2	0.23	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Arsenic	6.9		0.60	0.20	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Barium	45		0.60	0.068	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Beryllium	0.55		0.24	0.056	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Boron	9.8		3.0	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Cadmium	0.22	B	0.12	0.022	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Calcium	140000	B	120	20	mg/Kg	☼	11/14/19 17:35	11/18/19 12:31	10
Chromium	12		0.60	0.30	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Cobalt	9.2		0.30	0.078	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Copper	15		0.60	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Iron	17000		12	6.2	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Lead	16		0.30	0.14	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Magnesium	84000		60	30	mg/Kg	☼	11/14/19 17:35	11/18/19 12:31	10
Manganese	520		0.60	0.087	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Nickel	19		0.60	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Potassium	1800		30	11	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Silver	2.3		0.30	0.077	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Sodium	760		60	8.8	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Thallium	0.51	J	0.60	0.30	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Vanadium	16		0.30	0.070	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	1
Zinc	48		1.2	0.52	mg/Kg	☼	11/14/19 17:35	11/15/19 14:38	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		11/14/19 15:53	11/15/19 13:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 13:26	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:26	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-1

Lab Sample ID: 500-172892-1

Date Collected: 11/04/19 15:10

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 13:26	1
Manganese	3.5		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:26	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.10		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:21	1
Barium	0.77		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:21	1
Beryllium	0.0094		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:21	1
Boron	0.24		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:21	1
Cadmium	0.0022	J	0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:21	1
Calcium	39		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:21	1
Chromium	0.20		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:21	1
Cobalt	0.093		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:21	1
Iron	280		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:21	1
Lead	0.19		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:21	1
Manganese	2.1		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:21	1
Nickel	0.29	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:21	1
Potassium	46		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:21	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:21	1
Silver	0.020	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:21	1
Zinc	0.73		0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:21	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		11/14/19 15:53	11/15/19 15:06	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		11/08/19 15:02	11/12/19 17:06	1
Thallium	0.0038		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00032		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.020	0.0068	mg/Kg	☼	11/12/19 14:05	11/13/19 08:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.23	mg/Kg	☼	11/15/19 14:10	11/15/19 18:50	1
pH	8.5		0.2	0.2	SU			11/07/19 16:11	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-2

Lab Sample ID: 500-172892-2

Date Collected: 11/04/19 15:15

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00088	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
1,1-Dichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Acetone	0.011	J	0.021	0.0089	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Benzene	<0.0021		0.0021	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Chloroethane	<0.0051	*	0.0051	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Chloroform	<0.0021		0.0021	0.00071	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Dibromochloromethane	<0.0021		0.0021	0.00067	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Ethylbenzene	<0.0021		0.0021	0.00098	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00091	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Trichloroethene	<0.0021		0.0021	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Vinyl chloride	<0.0021		0.0021	0.00091	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	11/05/19 16:30	11/15/19 02:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/15/19 02:44	1
4-Bromofluorobenzene (Surr)	95		75 - 131	11/05/19 16:30	11/15/19 02:44	1
Dibromofluoromethane	91		75 - 126	11/05/19 16:30	11/15/19 02:44	1
Toluene-d8 (Surr)	96		75 - 124	11/05/19 16:30	11/15/19 02:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-2

Lab Sample ID: 500-172892-2

Date Collected: 11/04/19 15:15

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2,4-Dinitrophenol	<0.86	*	0.86	0.75	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2,4-Dinitrotoluene	<0.21		0.21	0.068	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2,6-Dinitrotoluene	<0.21		0.21	0.084	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2-Chlorophenol	<0.21		0.21	0.073	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2-Methylnaphthalene	<0.086	*	0.086	0.0078	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
4,6-Dinitro-2-methylphenol	<0.86		0.86	0.34	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.050	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
4-Nitrophenol	<0.86		0.86	0.40	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Benzo[b]fluoranthene	<0.042		0.042	0.0092	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Benzo[k]fluoranthene	<0.042		0.042	0.013	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.064	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Chrysene	<0.042		0.042	0.012	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Dimethyl phthalate	<0.21		0.21	0.056	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Fluoranthene	<0.042		0.042	0.0079	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Hexachlorobenzene	<0.086		0.086	0.0098	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Hexachlorocyclopentadiene	<0.86		0.86	0.24	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Hexachloroethane	<0.21		0.21	0.065	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-2

Lab Sample ID: 500-172892-2

Date Collected: 11/04/19 15:15

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 77.9

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	<0.042		0.042	0.011	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
N-Nitrosodiphenylamine	<0.21 *		0.21	0.050	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Pentachlorophenol	<0.86		0.86	0.68	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Pyrene	<0.042		0.042	0.0084	mg/Kg	☼	11/14/19 07:48	11/14/19 22:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	117		31 - 143				11/14/19 07:48	11/14/19 22:06	1
2-Fluorobiphenyl	82		43 - 145				11/14/19 07:48	11/14/19 22:06	1
2-Fluorophenol	87		31 - 166				11/14/19 07:48	11/14/19 22:06	1
Nitrobenzene-d5	69		37 - 147				11/14/19 07:48	11/14/19 22:06	1
Phenol-d5	74		30 - 153				11/14/19 07:48	11/14/19 22:06	1
Terphenyl-d14	96		42 - 157				11/14/19 07:48	11/14/19 22:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.2	0.23	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Arsenic	6.6		0.60	0.21	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Barium	140		0.60	0.069	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Beryllium	0.90		0.24	0.056	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Boron	5.0		3.0	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Cadmium	0.082	J B	0.12	0.022	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Calcium	7200	B	12	2.0	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Chromium	20		0.60	0.30	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Cobalt	9.7		0.30	0.079	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Copper	21		0.60	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Iron	19000		12	6.3	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Lead	15		0.30	0.14	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Magnesium	7000		6.0	3.0	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Manganese	440		0.60	0.088	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Nickel	32		0.60	0.18	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Potassium	1900		30	11	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Selenium	<0.60		0.60	0.36	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Silver	4.4		0.30	0.078	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Sodium	2000		60	8.9	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Thallium	1.3		0.60	0.30	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Vanadium	28		0.30	0.071	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	1
Zinc	97		1.2	0.53	mg/Kg	☼	11/14/19 17:35	11/15/19 14:42	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		11/14/19 15:53	11/15/19 13:30	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:30	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 13:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B09-2

Lab Sample ID: 500-172892-2

Date Collected: 11/04/19 15:15

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	7.9		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:30	1
Nickel	0.061		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.042	J	0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:25	1
Barium	1.1		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:25	1
Beryllium	0.0093		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:25	1
Boron	0.15		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:25	1
Calcium	19		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:25	1
Chromium	0.24		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:25	1
Cobalt	0.043		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:25	1
Iron	180		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:25	1
Lead	0.052		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:25	1
Manganese	2.7		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:25	1
Nickel	0.21	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:25	1
Potassium	31		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:25	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:25	1
Silver	0.016	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:25	1
Zinc	0.68		0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:25	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		11/14/19 15:53	11/15/19 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 17:10	1
Thallium	0.0057		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00069		0.00033	0.00033	mg/L		11/12/19 09:20	11/13/19 10:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.020	0.0065	mg/Kg	☼	11/12/19 14:05	11/13/19 08:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.29	mg/Kg	☼	11/15/19 14:10	11/15/19 18:50	1
pH	8.4		0.2	0.2	SU			11/07/19 16:14	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-1

Lab Sample ID: 500-172892-3

Date Collected: 11/04/19 15:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Chloroethane	<0.0038 *		0.0038	0.0011	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 03:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/15/19 03:09	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/05/19 16:30	11/15/19 03:09	1
Dibromofluoromethane	96		75 - 126	11/05/19 16:30	11/15/19 03:09	1
Toluene-d8 (Surr)	96		75 - 124	11/05/19 16:30	11/15/19 03:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-1

Lab Sample ID: 500-172892-3

Date Collected: 11/04/19 15:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2,4-Dinitrophenol	<0.76	*	0.76	0.66	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2-Methylnaphthalene	<0.076	*	0.076	0.0069	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Anthracene	0.0088	J	0.037	0.0063	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Benzo[a]anthracene	0.060		0.037	0.0051	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Benzo[a]pyrene	0.082		0.037	0.0073	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Benzo[b]fluoranthene	0.14		0.037	0.0081	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Benzo[g,h,i]perylene	0.064		0.037	0.012	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Benzo[k]fluoranthene	0.036	J	0.037	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Chrysene	0.090		0.037	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Fluoranthene	0.15		0.037	0.0070	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-1

Lab Sample ID: 500-172892-3

Date Collected: 11/04/19 15:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.057		0.037	0.0097	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
N-Nitrosodiphenylamine	<0.19 *		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Phenanthrene	0.055		0.037	0.0052	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Pyrene	0.12		0.037	0.0075	mg/Kg	☼	11/14/19 07:48	11/15/19 00:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		31 - 143				11/14/19 07:48	11/15/19 00:49	1
2-Fluorobiphenyl	91		43 - 145				11/14/19 07:48	11/15/19 00:49	1
2-Fluorophenol	92		31 - 166				11/14/19 07:48	11/15/19 00:49	1
Nitrobenzene-d5	74		37 - 147				11/14/19 07:48	11/15/19 00:49	1
Phenol-d5	79		30 - 153				11/14/19 07:48	11/15/19 00:49	1
Terphenyl-d14	100		42 - 157				11/14/19 07:48	11/15/19 00:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.2	0.22	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Arsenic	6.8		0.58	0.20	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Barium	56		0.58	0.066	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Beryllium	0.60		0.23	0.054	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Boron	11		2.9	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Cadmium	0.21	B	0.12	0.021	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Calcium	98000	B	120	20	mg/Kg	☼	11/14/19 17:35	11/18/19 12:36	10
Chromium	14		0.58	0.29	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Cobalt	9.8		0.29	0.075	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Copper	21		0.58	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Iron	18000		12	6.0	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Lead	27		0.29	0.13	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Magnesium	56000		58	29	mg/Kg	☼	11/14/19 17:35	11/18/19 12:36	10
Manganese	420		0.58	0.083	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Nickel	24		0.58	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Potassium	2200		29	10	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Selenium	0.40	J	0.58	0.34	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Silver	2.7		0.29	0.074	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Sodium	850		58	8.5	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Thallium	0.75		0.58	0.29	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Vanadium	20		0.29	0.068	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	1
Zinc	67		1.2	0.51	mg/Kg	☼	11/14/19 17:35	11/15/19 14:54	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		11/14/19 15:53	11/15/19 13:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 13:34	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:34	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-1

Lab Sample ID: 500-172892-3

Date Collected: 11/04/19 15:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 13:34	1
Manganese	0.078		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:34	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.092		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:29	1
Barium	0.79		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:29	1
Beryllium	0.0097		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:29	1
Boron	0.22		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:29	1
Calcium	39		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:29	1
Chromium	0.21		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:29	1
Cobalt	0.064		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:29	1
Iron	230		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:29	1
Lead	0.18		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:29	1
Manganese	1.2		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:29	1
Nickel	0.23 ^		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:29	1
Potassium	42		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:29	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:29	1
Silver	0.017 J		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:29	1
Zinc	0.77		0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:29	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		11/14/19 15:53	11/15/19 15:14	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		11/08/19 15:02	11/12/19 17:13	1
Thallium	0.0045		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00035		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 10:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017 J		0.018	0.0058	mg/Kg	☼	11/12/19 14:05	11/13/19 08:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.24	mg/Kg	☼	11/15/19 14:10	11/15/19 18:51	1
pH	8.4		0.2	0.2	SU			11/07/19 16:17	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-2

Lab Sample ID: 500-172892-4

Date Collected: 11/04/19 15:05

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 03:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/05/19 16:30	11/15/19 03:34	1
4-Bromofluorobenzene (Surr)	83		75 - 131	11/05/19 16:30	11/15/19 03:34	1
Dibromofluoromethane	110		75 - 126	11/05/19 16:30	11/15/19 03:34	1
Toluene-d8 (Surr)	92		75 - 124	11/05/19 16:30	11/15/19 03:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-2

Lab Sample ID: 500-172892-4

Date Collected: 11/04/19 15:05

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2-Methylnaphthalene	<0.076	*	0.076	0.0070	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Anthracene	0.0073	J	0.038	0.0063	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Benzo[a]anthracene	0.046		0.038	0.0051	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Benzo[a]pyrene	0.058		0.038	0.0073	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Benzo[b]fluoranthene	0.045		0.038	0.0082	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Benzo[g,h,i]perylene	0.032	J	0.038	0.012	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Benzo[k]fluoranthene	0.072		0.038	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Chrysene	0.060		0.038	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Fluoranthene	0.10		0.038	0.0070	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-2

Lab Sample ID: 500-172892-4

Date Collected: 11/04/19 15:05

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 85.7

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	0.032	J	0.038	0.0098	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
N-Nitrosodiphenylamine	<0.19	*	0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Phenanthrene	0.037	J	0.038	0.0053	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Pyrene	0.085		0.038	0.0075	mg/Kg	☼	11/14/19 07:48	11/15/19 01:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		31 - 143				11/14/19 07:48	11/15/19 01:16	1
2-Fluorobiphenyl	84		43 - 145				11/14/19 07:48	11/15/19 01:16	1
2-Fluorophenol	81		31 - 166				11/14/19 07:48	11/15/19 01:16	1
Nitrobenzene-d5	67		37 - 147				11/14/19 07:48	11/15/19 01:16	1
Phenol-d5	71		30 - 153				11/14/19 07:48	11/15/19 01:16	1
Terphenyl-d14	86		42 - 157				11/14/19 07:48	11/15/19 01:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.53	J	1.1	0.22	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Arsenic	7.1		0.55	0.19	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Barium	62		0.55	0.063	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Beryllium	0.67		0.22	0.052	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Boron	10		2.8	0.26	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Cadmium	0.28	B	0.11	0.020	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Calcium	72000	B	110	19	mg/Kg	☼	11/14/19 17:35	11/18/19 12:40	10
Chromium	16		0.55	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Cobalt	11		0.28	0.073	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Copper	21		0.55	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Iron	17000		11	5.8	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Lead	85		0.28	0.13	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Magnesium	32000		5.5	2.8	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Manganese	500		0.55	0.080	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Nickel	24		0.55	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Potassium	2100		28	9.8	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Selenium	<0.55		0.55	0.33	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Silver	2.8		0.28	0.072	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Sodium	1000		55	8.2	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Thallium	0.55		0.55	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Vanadium	21		0.28	0.065	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	1
Zinc	74		1.1	0.49	mg/Kg	☼	11/14/19 17:35	11/15/19 14:57	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		11/14/19 15:53	11/15/19 13:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 13:39	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:39	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B10-2

Lab Sample ID: 500-172892-4

Date Collected: 11/04/19 15:05

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 85.7

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		11/14/19 15:53	11/15/19 13:39	1
Manganese	0.63		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:39	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.074		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:32	1
Barium	0.60		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:32	1
Beryllium	0.0063		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:32	1
Boron	0.19		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:32	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:32	1
Calcium	29		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:32	1
Chromium	0.15		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:32	1
Cobalt	0.049		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:32	1
Iron	170		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:32	1
Lead	0.15		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:32	1
Manganese	1.0		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:32	1
Nickel	0.18 ^		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:32	1
Potassium	34		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:32	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:32	1
Silver	0.013 J		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:32	1
Zinc	0.56		0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:32	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		11/14/19 15:53	11/15/19 15:18	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		11/08/19 15:02	11/12/19 17:17	1
Thallium	0.0034		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 10:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.017	0.0057	mg/Kg	☼	11/12/19 14:05	11/13/19 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.22	mg/Kg	☼	11/15/19 14:10	11/15/19 18:51	1
pH	8.6		0.2	0.2	SU			11/07/19 16:21	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-1

Lab Sample ID: 500-172892-5

Date Collected: 11/04/19 14:40

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1
Xylenes, Total	0.00052	J	0.0031	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 03:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/05/19 16:30	11/15/19 03:59	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/05/19 16:30	11/15/19 03:59	1
Dibromofluoromethane	89		75 - 126	11/05/19 16:30	11/15/19 03:59	1
Toluene-d8 (Surr)	97		75 - 124	11/05/19 16:30	11/15/19 03:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-1

Lab Sample ID: 500-172892-5

Date Collected: 11/04/19 14:40

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2,4-Dinitrophenol	<0.77	*	0.77	0.67	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2-Methylnaphthalene	<0.077	*	0.077	0.0070	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Acenaphthylene	0.034	J	0.038	0.0050	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Anthracene	0.027	J	0.038	0.0064	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Benzo[a]anthracene	0.077		0.038	0.0051	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Benzo[a]pyrene	0.086		0.038	0.0074	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Benzo[b]fluoranthene	0.12		0.038	0.0082	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Benzo[g,h,i]perylene	0.040		0.038	0.012	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Benzo[k]fluoranthene	0.036	J	0.038	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Chrysene	0.084		0.038	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Dibenz(a,h)anthracene	0.0095	J	0.038	0.0074	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Fluoranthene	0.16		0.038	0.0071	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Fluorene	0.010	J	0.038	0.0054	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-1

Lab Sample ID: 500-172892-5

Date Collected: 11/04/19 14:40

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.3

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	0.042		0.038	0.0099	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
N-Nitrosodiphenylamine	<0.19 *		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Phenanthrene	0.11		0.038	0.0053	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Pyrene	0.13		0.038	0.0076	mg/Kg	☼	11/14/19 07:48	11/15/19 01:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		31 - 143				11/14/19 07:48	11/15/19 01:43	1
2-Fluorobiphenyl	89		43 - 145				11/14/19 07:48	11/15/19 01:43	1
2-Fluorophenol	88		31 - 166				11/14/19 07:48	11/15/19 01:43	1
Nitrobenzene-d5	72		37 - 147				11/14/19 07:48	11/15/19 01:43	1
Phenol-d5	79		30 - 153				11/14/19 07:48	11/15/19 01:43	1
Terphenyl-d14	97		42 - 157				11/14/19 07:48	11/15/19 01:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.1	0.22	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Arsenic	8.1		0.57	0.19	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Barium	61		0.57	0.065	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Beryllium	0.69		0.23	0.053	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Boron	9.8		2.8	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Cadmium	0.23	B	0.11	0.020	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Calcium	70000	B	110	19	mg/Kg	☼	11/14/19 17:35	11/18/19 12:44	10
Chromium	15		0.57	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Cobalt	11		0.28	0.075	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Copper	21		0.57	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Iron	20000		11	5.9	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Lead	86		0.28	0.13	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Magnesium	31000		5.7	2.8	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Manganese	490		0.57	0.082	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Nickel	26		0.57	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Potassium	2100		28	10	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Silver	3.0		0.28	0.073	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Sodium	1300		57	8.4	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Thallium	0.81		0.57	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Vanadium	21		0.28	0.067	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1
Zinc	74		1.1	0.50	mg/Kg	☼	11/14/19 17:35	11/15/19 15:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/14/19 15:53	11/15/19 13:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 13:43	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:43	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-1

Lab Sample ID: 500-172892-5

Date Collected: 11/04/19 14:40

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 13:43	1
Manganese	0.067		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:43	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.10		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:36	1
Barium	0.77		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:36	1
Beryllium	0.0094		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:36	1
Boron	0.22		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:36	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:36	1
Calcium	36		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:36	1
Chromium	0.21		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:36	1
Cobalt	0.071		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:36	1
Iron	240		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:36	1
Lead	0.27		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:36	1
Manganese	1.4		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:36	1
Nickel	0.25	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:36	1
Potassium	42		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:36	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:36	1
Silver	0.019	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:36	1
Zinc	0.80		0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:36	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		11/14/19 15:53	11/15/19 15:22	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		11/08/19 15:02	11/12/19 17:21	1
Thallium	0.0047		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00030		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0062	mg/Kg	☼	11/12/19 14:05	11/13/19 08:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	11/15/19 14:10	11/15/19 18:52	1
pH	8.6		0.2	0.2	SU			11/07/19 16:24	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-2

Lab Sample ID: 500-172892-6

Date Collected: 11/04/19 14:45

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Acetone	0.019		0.015	0.0065	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Chloroethane	<0.0037 *		0.0037	0.0011	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 04:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/05/19 16:30	11/15/19 04:24	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/05/19 16:30	11/15/19 04:24	1
Dibromofluoromethane	94		75 - 126	11/05/19 16:30	11/15/19 04:24	1
Toluene-d8 (Surr)	95		75 - 124	11/05/19 16:30	11/15/19 04:24	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	☼	11/14/19 07:48	11/15/19 02:10	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-2

Lab Sample ID: 500-172892-6

Date Collected: 11/04/19 14:45

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2,4-Dinitrophenol	<0.77	*	0.77	0.68	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2-Methylnaphthalene	<0.077	*	0.077	0.0071	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Anthracene	0.0091	J	0.038	0.0064	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Benzo[a]anthracene	0.052		0.038	0.0052	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Benzo[a]pyrene	0.058		0.038	0.0074	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Benzo[b]fluoranthene	0.041		0.038	0.0083	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Benzo[k]fluoranthene	0.080		0.038	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Chrysene	0.070		0.038	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Fluoranthene	0.10		0.038	0.0071	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-2

Lab Sample ID: 500-172892-6

Date Collected: 11/04/19 14:45

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.7

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	0.028	J	0.038	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
N-Nitrosodiphenylamine	<0.19	*	0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Phenanthrene	0.033	J	0.038	0.0054	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Pyrene	0.10		0.038	0.0076	mg/Kg	☼	11/14/19 07:48	11/15/19 02:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		31 - 143				11/14/19 07:48	11/15/19 02:10	1
2-Fluorobiphenyl	86		43 - 145				11/14/19 07:48	11/15/19 02:10	1
2-Fluorophenol	83		31 - 166				11/14/19 07:48	11/15/19 02:10	1
Nitrobenzene-d5	67		37 - 147				11/14/19 07:48	11/15/19 02:10	1
Phenol-d5	73		30 - 153				11/14/19 07:48	11/15/19 02:10	1
Terphenyl-d14	106		42 - 157				11/14/19 07:48	11/15/19 02:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.1	0.22	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Arsenic	9.3		0.57	0.19	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Barium	61		0.57	0.065	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Beryllium	0.62		0.23	0.053	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Boron	10		2.8	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Cadmium	0.21	B	0.11	0.020	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Calcium	71000	B	110	19	mg/Kg	☼	11/14/19 17:35	11/18/19 12:48	10
Chromium	15		0.57	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Cobalt	13		0.28	0.075	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Copper	24		0.57	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Iron	22000		11	5.9	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Lead	21		0.28	0.13	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Magnesium	30000		5.7	2.8	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Manganese	470		0.57	0.083	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Nickel	31		0.57	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Potassium	2400		28	10	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Silver	3.1		0.28	0.073	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Sodium	960		57	8.4	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Thallium	0.87		0.57	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Vanadium	21		0.28	0.067	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	1
Zinc	80		1.1	0.50	mg/Kg	☼	11/14/19 17:35	11/15/19 15:05	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		11/14/19 15:53	11/15/19 13:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 13:47	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:47	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B11-2

Lab Sample ID: 500-172892-6

Date Collected: 11/04/19 14:45

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.7

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		11/14/19 15:53	11/15/19 13:47	1
Manganese	7.5		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:47	1
Nickel	0.013	J	0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.11		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:40	1
Barium	0.83		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:40	1
Beryllium	0.0098		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:40	1
Boron	0.25		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:40	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:40	1
Calcium	43		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:40	1
Chromium	0.21		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:40	1
Cobalt	0.12		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:40	1
Iron	260		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:40	1
Lead	0.20		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:40	1
Manganese	2.7		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:40	1
Nickel	0.32	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:40	1
Potassium	49		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:40	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:40	1
Silver	0.020	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:40	1
Zinc	0.81		0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:53	11/15/19 15:34	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		11/08/19 15:02	11/12/19 17:25	1
Thallium	0.0047		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:25	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		11/12/19 09:20	11/13/19 10:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.019	0.0062	mg/Kg	☼	11/12/19 14:05	11/13/19 08:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	11/15/19 14:10	11/15/19 18:52	1
pH	8.1		0.2	0.2	SU			11/07/19 16:27	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12

Lab Sample ID: 500-172892-7

Date Collected: 11/04/19 14:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Chloroethane	<0.0041 *		0.0041	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 04:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/05/19 16:30	11/15/19 04:49	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/05/19 16:30	11/15/19 04:49	1
Dibromofluoromethane	91		75 - 126	11/05/19 16:30	11/15/19 04:49	1
Toluene-d8 (Surr)	96		75 - 124	11/05/19 16:30	11/15/19 04:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12

Lab Sample ID: 500-172892-7

Date Collected: 11/04/19 14:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2-Methylnaphthalene	<0.081	*	0.081	0.0074	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Acenaphthene	0.014	J	0.040	0.0072	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Acenaphthylene	0.0099	J	0.040	0.0053	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Anthracene	0.054		0.040	0.0067	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Benzo[a]anthracene	0.39		0.040	0.0054	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Benzo[a]pyrene	0.47		0.040	0.0078	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Benzo[b]fluoranthene	0.85		0.040	0.0087	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Benzo[g,h,i]perylene	0.26		0.040	0.013	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Benzo[k]fluoranthene	0.32		0.040	0.012	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Carbazole	0.10	J	0.20	0.10	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Chrysene	0.62		0.040	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Dibenz(a,h)anthracene	0.068		0.040	0.0078	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Fluoranthene	0.89		0.040	0.0074	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Fluorene	0.020	J	0.040	0.0056	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12

Lab Sample ID: 500-172892-7

Date Collected: 11/04/19 14:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.2

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	0.25		0.040	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
N-Nitrosodiphenylamine	<0.20 *		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Phenanthrene	0.38		0.040	0.0056	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Pyrene	0.68		0.040	0.0080	mg/Kg	☼	11/14/19 07:48	11/15/19 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	54		31 - 143				11/14/19 07:48	11/15/19 18:52	1
2-Fluorobiphenyl	85		43 - 145				11/14/19 07:48	11/15/19 18:52	1
2-Fluorophenol	74		31 - 166				11/14/19 07:48	11/15/19 18:52	1
Nitrobenzene-d5	66		37 - 147				11/14/19 07:48	11/15/19 18:52	1
Phenol-d5	84		30 - 153				11/14/19 07:48	11/15/19 18:52	1
Terphenyl-d14	103		42 - 157				11/14/19 07:48	11/15/19 18:52	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.63	J	1.2	0.23	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Arsenic	6.7		0.59	0.20	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Barium	82		0.59	0.067	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Beryllium	0.72		0.23	0.055	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Boron	7.4		2.9	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Cadmium	0.18	B	0.12	0.021	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Calcium	34000	B	12	2.0	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Chromium	16		0.59	0.29	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Cobalt	12		0.29	0.077	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Copper	20		0.59	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Iron	18000		12	6.1	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Lead	31		0.29	0.14	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Manganese	480		0.59	0.085	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Nickel	23		0.59	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Potassium	2000		29	10	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Selenium	0.61		0.59	0.34	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Silver	3.0		0.29	0.076	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Sodium	690		59	8.7	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Thallium	0.89		0.59	0.29	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Vanadium	23		0.29	0.069	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	1
Zinc	69		1.2	0.51	mg/Kg	☼	11/14/19 17:35	11/15/19 15:09	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		11/14/19 15:53	11/15/19 13:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 13:51	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:51	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12

Lab Sample ID: 500-172892-7

Date Collected: 11/04/19 14:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 13:51	1
Manganese	0.052		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:51	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.056		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:44	1
Barium	0.62		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:44	1
Beryllium	0.0062		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:44	1
Boron	0.16		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:44	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:44	1
Calcium	26		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:44	1
Chromium	0.15		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:44	1
Cobalt	0.039		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:44	1
Iron	150		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:44	1
Lead	0.13		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:44	1
Manganese	0.93		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:44	1
Nickel	0.15 ^		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:44	1
Potassium	29		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:44	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:44	1
Silver	0.011 J		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:44	1
Zinc	0.51		0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:53	11/15/19 15:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 17:28	1
Thallium	0.0032		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:28	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		11/12/19 09:20	11/13/19 10:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014 J		0.018	0.0061	mg/Kg	☼	11/12/19 14:05	11/13/19 08:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	11/15/19 14:10	11/15/19 18:52	1
pH	8.4		0.2	0.2	SU			11/07/19 16:34	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12 Dup

Lab Sample ID: 500-172892-8

Date Collected: 11/04/19 14:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Acetone	0.0086	J	0.017	0.0073	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 05:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/15/19 05:14	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/05/19 16:30	11/15/19 05:14	1
Dibromofluoromethane	95		75 - 126	11/05/19 16:30	11/15/19 05:14	1
Toluene-d8 (Surr)	93		75 - 124	11/05/19 16:30	11/15/19 05:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12 Dup

Lab Sample ID: 500-172892-8

Date Collected: 11/04/19 14:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2,4-Dinitrophenol	<0.72	*	0.72	0.63	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2-Methylnaphthalene	<0.072	*	0.072	0.0065	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Acenaphthene	0.033	J	0.035	0.0064	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Acenaphthylene	0.011	J	0.035	0.0047	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Anthracene	0.13		0.035	0.0059	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Benzo[a]anthracene	0.95		0.035	0.0048	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Carbazole	0.19		0.18	0.089	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Chrysene	1.2		0.035	0.0097	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Fluorene	0.046		0.035	0.0050	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Hexachlorobenzene	<0.072		0.072	0.0082	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.043	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
N-Nitrosodiphenylamine	<0.18	*	0.18	0.042	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12 Dup

Lab Sample ID: 500-172892-8

Date Collected: 11/04/19 14:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	1.0		0.035	0.0050	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Pyrene	2.0		0.035	0.0071	mg/Kg	☼	11/14/19 07:48	11/15/19 03:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		31 - 143				11/14/19 07:48	11/15/19 03:04	1
2-Fluorobiphenyl	71		43 - 145				11/14/19 07:48	11/15/19 03:04	1
2-Fluorophenol	63		31 - 166				11/14/19 07:48	11/15/19 03:04	1
Nitrobenzene-d5	51		37 - 147				11/14/19 07:48	11/15/19 03:04	1
Phenol-d5	57		30 - 153				11/14/19 07:48	11/15/19 03:04	1
Terphenyl-d14	98		42 - 157				11/14/19 07:48	11/15/19 03:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	1.1		0.071	0.014	mg/Kg	☼	11/14/19 07:48	11/15/19 19:16	2
Benzo[b]fluoranthene	1.7		0.071	0.015	mg/Kg	☼	11/14/19 07:48	11/15/19 19:16	2
Benzo[g,h,i]perylene	0.54		0.071	0.023	mg/Kg	☼	11/14/19 07:48	11/15/19 19:16	2
Benzo[k]fluoranthene	0.62		0.071	0.021	mg/Kg	☼	11/14/19 07:48	11/15/19 19:16	2
Dibenz(a,h)anthracene	0.17		0.071	0.014	mg/Kg	☼	11/14/19 07:48	11/15/19 19:16	2
Fluoranthene	2.4		0.071	0.013	mg/Kg	☼	11/14/19 07:48	11/15/19 19:16	2
Indeno[1,2,3-cd]pyrene	0.53		0.071	0.018	mg/Kg	☼	11/14/19 07:48	11/15/19 19:16	2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J	1.1	0.21	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Arsenic	2.8		0.54	0.18	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Barium	30		0.54	0.062	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Beryllium	0.32		0.22	0.050	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Boron	10		2.7	0.25	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Cadmium	0.20	B	0.11	0.019	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Calcium	150000	B	110	18	mg/Kg	☼	11/14/19 17:35	11/18/19 12:52	10
Chromium	11		0.54	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Cobalt	4.1		0.27	0.071	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Copper	13		0.54	0.15	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Iron	7900		11	5.6	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Lead	30		0.27	0.12	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Magnesium	91000		54	27	mg/Kg	☼	11/14/19 17:35	11/18/19 12:52	10
Manganese	270		0.54	0.078	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Nickel	9.2		0.54	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Potassium	960		27	9.6	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Silver	1.3		0.27	0.070	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Sodium	290		54	8.0	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Vanadium	11		0.27	0.064	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	1
Zinc	48		1.1	0.47	mg/Kg	☼	11/14/19 17:35	11/15/19 15:13	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	☼	11/14/19 15:53	11/15/19 13:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B12 Dup

Lab Sample ID: 500-172892-8

Date Collected: 11/04/19 14:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:56	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 13:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 13:56	1
Manganese	0.33		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:56	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 13:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.043	J	0.050	0.010	mg/L		11/08/19 15:02	11/12/19 12:48	1
Barium	0.44	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 12:48	1
Beryllium	0.0046		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 12:48	1
Boron	0.10		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 12:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 12:48	1
Calcium	20		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:48	1
Chromium	0.11		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:48	1
Cobalt	0.024	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:48	1
Iron	110		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 12:48	1
Lead	0.096		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 12:48	1
Manganese	0.69		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:48	1
Nickel	0.11	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:48	1
Potassium	19		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 12:48	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 12:48	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 12:48	1
Zinc	0.38	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 12:48	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		11/14/19 15:53	11/15/19 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 17:32	1
Thallium	0.0023		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:32	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		11/12/19 09:20	11/13/19 10:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081		0.017	0.0057	mg/Kg	☼	11/12/19 14:05	11/13/19 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.26	mg/Kg	☼	11/15/19 14:10	11/15/19 18:53	1
pH	8.1		0.2	0.2	SU			11/07/19 16:40	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-1

Lab Sample ID: 500-172892-10

Date Collected: 11/04/19 15:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 75.1

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	☼	11/05/19 16:30	11/15/19 05:39	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 05:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/05/19 16:30	11/15/19 05:39	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/05/19 16:30	11/15/19 05:39	1
Dibromofluoromethane	91		75 - 126	11/05/19 16:30	11/15/19 05:39	1
Toluene-d8 (Surr)	98		75 - 124	11/05/19 16:30	11/15/19 05:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
1,4-Dichlorobenzene	<0.21		0.21	0.055	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-1

Lab Sample ID: 500-172892-10

Date Collected: 11/04/19 15:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2,4-Dinitrophenol	<0.86	*	0.86	0.75	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2,4-Dinitrotoluene	<0.21		0.21	0.068	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2,6-Dinitrotoluene	<0.21		0.21	0.084	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2-Chlorophenol	<0.21		0.21	0.073	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2-Methylnaphthalene	<0.086	*	0.086	0.0078	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.060	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
4,6-Dinitro-2-methylphenol	<0.86		0.86	0.34	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
4-Chloro-3-methylphenol	<0.42		0.42	0.15	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
4-Nitrophenol	<0.86		0.86	0.41	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Acenaphthene	<0.042		0.042	0.0077	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Acenaphthylene	0.0095	J	0.042	0.0056	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Anthracene	0.014	J	0.042	0.0071	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Benzo[a]anthracene	0.071		0.042	0.0057	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Benzo[a]pyrene	0.097		0.042	0.0083	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Benzo[b]fluoranthene	0.16		0.042	0.0092	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Benzo[g,h,i]perylene	0.083		0.042	0.014	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Benzo[k]fluoranthene	0.059		0.042	0.013	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.044	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.064	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Chrysene	0.11		0.042	0.012	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Dibenz(a,h)anthracene	0.015	J	0.042	0.0082	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Dimethyl phthalate	<0.21		0.21	0.056	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Di-n-octyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Fluoranthene	0.16		0.042	0.0079	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Hexachlorobenzene	<0.086		0.086	0.0099	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Hexachlorocyclopentadiene	<0.86		0.86	0.25	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Hexachloroethane	<0.21		0.21	0.065	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-1

Lab Sample ID: 500-172892-10

Date Collected: 11/04/19 15:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 75.1

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	0.062		0.042	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Naphthalene	<0.042		0.042	0.0066	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
N-Nitrosodiphenylamine	<0.21 *		0.21	0.050	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Pentachlorophenol	<0.86		0.86	0.68	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Phenanthrene	0.074		0.042	0.0059	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Phenol	<0.21		0.21	0.095	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Pyrene	0.14		0.042	0.0085	mg/Kg	☼	11/14/19 07:48	11/15/19 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		31 - 143				11/14/19 07:48	11/15/19 18:28	1
2-Fluorobiphenyl	89		43 - 145				11/14/19 07:48	11/15/19 18:28	1
2-Fluorophenol	70		31 - 166				11/14/19 07:48	11/15/19 18:28	1
Nitrobenzene-d5	68		37 - 147				11/14/19 07:48	11/15/19 18:28	1
Phenol-d5	77		30 - 153				11/14/19 07:48	11/15/19 18:28	1
Terphenyl-d14	95		42 - 157				11/14/19 07:48	11/15/19 18:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J	1.2	0.24	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Arsenic	5.9		0.62	0.21	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Barium	92		0.62	0.071	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Beryllium	0.73		0.25	0.058	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Boron	6.1		3.1	0.29	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Cadmium	0.32	B	0.12	0.022	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Calcium	17000	B	12	2.1	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Chromium	16		0.62	0.31	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Cobalt	8.6		0.31	0.081	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Copper	22		0.62	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Iron	17000		12	6.5	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Lead	51		0.31	0.14	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Magnesium	11000		6.2	3.1	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Manganese	590		0.62	0.090	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Nickel	21		0.62	0.18	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Potassium	1900		31	11	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Selenium	0.58	J	0.62	0.37	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Silver	3.7		0.31	0.080	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Sodium	260		62	9.2	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Thallium	0.86		0.62	0.31	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Vanadium	22		0.31	0.073	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1
Zinc	110		1.2	0.55	mg/Kg	☼	11/14/19 17:35	11/15/19 15:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 14:09	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:09	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:09	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-1

Lab Sample ID: 500-172892-10

Date Collected: 11/04/19 15:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.074		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.039	J	0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:00	1
Barium	0.45	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:00	1
Beryllium	0.0049		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:00	1
Boron	0.11		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:00	1
Calcium	18		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:00	1
Chromium	0.11		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:00	1
Cobalt	0.023	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:00	1
Iron	110		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:00	1
Lead	0.052		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:00	1
Manganese	0.52		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:00	1
Nickel	0.098		0.025	0.010	mg/L		11/08/19 15:02	11/13/19 19:45	1
Potassium	22		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:00	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:00	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:00	1
Zinc	0.37	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:53	11/15/19 15:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 17:48	1
Thallium	0.0024		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:48	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		11/12/19 09:20	11/13/19 10:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.021	0.0070	mg/Kg	☼	11/12/19 14:05	11/13/19 08:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.30	mg/Kg	☼	11/15/19 14:10	11/15/19 18:53	1
pH	7.3		0.2	0.2	SU			11/07/19 16:43	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-2

Lab Sample ID: 500-172892-11

Date Collected: 11/04/19 15:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 06:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/15/19 06:04	1
4-Bromofluorobenzene (Surr)	95		75 - 131	11/05/19 16:30	11/15/19 06:04	1
Dibromofluoromethane	92		75 - 126	11/05/19 16:30	11/15/19 06:04	1
Toluene-d8 (Surr)	96		75 - 124	11/05/19 16:30	11/15/19 06:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-2

Lab Sample ID: 500-172892-11

Date Collected: 11/04/19 15:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2-Methylnaphthalene	<0.076	*	0.076	0.0070	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-2

Lab Sample ID: 500-172892-11

Date Collected: 11/04/19 15:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
N-Nitrosodiphenylamine	<0.19 *		0.19	0.045	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	11/14/19 07:48	11/14/19 22:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		31 - 143				11/14/19 07:48	11/14/19 22:33	1
2-Fluorobiphenyl	84		43 - 145				11/14/19 07:48	11/14/19 22:33	1
2-Fluorophenol	87		31 - 166				11/14/19 07:48	11/14/19 22:33	1
Nitrobenzene-d5	69		37 - 147				11/14/19 07:48	11/14/19 22:33	1
Phenol-d5	76		30 - 153				11/14/19 07:48	11/14/19 22:33	1
Terphenyl-d14	95		42 - 157				11/14/19 07:48	11/14/19 22:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	J	1.1	0.22	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Arsenic	7.3		0.55	0.19	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Barium	77		0.55	0.063	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Beryllium	0.55		0.22	0.052	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Boron	11		2.8	0.26	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Cadmium	0.20	B	0.11	0.020	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Calcium	100000	B	110	19	mg/Kg	☼	11/14/19 17:35	11/18/19 13:05	10
Chromium	14		0.55	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Cobalt	10		0.28	0.072	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Copper	19		0.55	0.15	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Iron	18000		11	5.8	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Lead	11		0.28	0.13	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Magnesium	56000		55	27	mg/Kg	☼	11/14/19 17:35	11/18/19 13:05	10
Manganese	380		0.55	0.080	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Nickel	25		0.55	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Potassium	2500		28	9.8	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Selenium	<0.55		0.55	0.33	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Silver	2.7		0.28	0.071	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Sodium	320		55	8.2	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Thallium	0.82		0.55	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Vanadium	18		0.28	0.065	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	1
Zinc	56		1.1	0.49	mg/Kg	☼	11/14/19 17:35	11/15/19 15:21	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		11/14/19 15:53	11/15/19 14:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 14:13	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:13	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:13	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-2

Lab Sample ID: 500-172892-11

Date Collected: 11/04/19 15:25

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:13	1
Manganese	0.67		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:13	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.052		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:04	1
Barium	0.38	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:04	1
Beryllium	0.0053		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:04	1
Boron	0.18		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:04	1
Calcium	30		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:04	1
Chromium	0.12		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:04	1
Cobalt	0.034		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:04	1
Iron	120		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:04	1
Lead	0.059		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:04	1
Manganese	0.60		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:04	1
Nickel	0.12	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:04	1
Potassium	32		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:04	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:04	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:04	1
Zinc	0.33	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:04	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		11/14/19 15:53	11/15/19 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 17:51	1
Thallium	0.0025		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:51	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		11/12/19 09:20	11/13/19 10:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.018	0.0060	mg/Kg	☼	11/12/19 14:05	11/13/19 08:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.26	mg/Kg	☼	11/15/19 14:10	11/15/19 18:54	1
pH	7.7		0.2	0.2	SU			11/07/19 16:47	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-3

Lab Sample ID: 500-172892-12

Date Collected: 11/04/19 15:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Chloroethane	<0.0039 *		0.0039	0.0011	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Trichloroethene	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 06:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/05/19 16:30	11/15/19 06:29	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/05/19 16:30	11/15/19 06:29	1
Dibromofluoromethane	98		75 - 126	11/05/19 16:30	11/15/19 06:29	1
Toluene-d8 (Surr)	91		75 - 124	11/05/19 16:30	11/15/19 06:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-3

Lab Sample ID: 500-172892-12

Date Collected: 11/04/19 15:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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	☼	11/14/19 07:48	11/14/19 23:00	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2-Methylnaphthalene	<0.079	*	0.079	0.0072	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-3

Lab Sample ID: 500-172892-12

Date Collected: 11/04/19 15:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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	☼	11/14/19 07:48	11/14/19 23:00	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/14/19 07:48	11/14/19 23:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	94		31 - 143				11/14/19 07:48	11/14/19 23:00	1
2-Fluorobiphenyl	92		43 - 145				11/14/19 07:48	11/14/19 23:00	1
2-Fluorophenol	81		31 - 166				11/14/19 07:48	11/14/19 23:00	1
Nitrobenzene-d5	78		37 - 147				11/14/19 07:48	11/14/19 23:00	1
Phenol-d5	79		30 - 153				11/14/19 07:48	11/14/19 23:00	1
Terphenyl-d14	97		42 - 157				11/14/19 07:48	11/14/19 23:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.73	J	1.1	0.22	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Arsenic	7.6		0.57	0.20	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Barium	46		0.57	0.066	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Beryllium	0.72		0.23	0.054	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Boron	13		2.9	0.27	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Cadmium	0.13	B	0.11	0.021	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Calcium	100000	B	110	19	mg/Kg	☼	11/14/19 17:35	11/18/19 13:10	10
Chromium	16		0.57	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Cobalt	8.8		0.29	0.075	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Copper	19		0.57	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Iron	17000		11	6.0	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Lead	9.4		0.29	0.13	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Magnesium	50000		57	29	mg/Kg	☼	11/14/19 17:35	11/18/19 13:10	10
Manganese	350		0.57	0.083	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Nickel	23		0.57	0.17	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Potassium	3100		29	10	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Silver	2.8		0.29	0.074	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Sodium	620		57	8.5	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Thallium	0.49	J	0.57	0.29	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Vanadium	20		0.29	0.068	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	1
Zinc	44		1.1	0.50	mg/Kg	☼	11/14/19 17:35	11/15/19 15:25	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		11/08/19 15:02	11/12/19 13:08	1
Barium	<0.50		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:08	1
Boron	<0.10		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-3

Lab Sample ID: 500-172892-12

Date Collected: 11/04/19 15:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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		11/08/19 15:02	11/12/19 13:08	1
Calcium	8.9		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:08	1
Chromium	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:08	1
Cobalt	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:08	1
Iron	4.2		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:08	1
Manganese	0.080		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:08	1
Nickel	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:08	1
Potassium	2.5		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:08	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:08	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:08	1
Zinc	0.022	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:08	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		11/08/19 15:02	11/12/19 17:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:55	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		11/12/19 09:20	11/13/19 10:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0099	J	0.019	0.0063	mg/Kg	☼	11/12/19 14:05	11/13/19 08:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.29	mg/Kg	☼	11/15/19 14:10	11/15/19 18:55	1
pH	7.9		0.2	0.2	SU			11/07/19 16:50	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-4

Lab Sample ID: 500-172892-13

Date Collected: 11/04/19 15:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 06:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	11/05/19 16:30	11/15/19 06:54	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/05/19 16:30	11/15/19 06:54	1
Dibromofluoromethane	98		75 - 126	11/05/19 16:30	11/15/19 06:54	1
Toluene-d8 (Surr)	92		75 - 124	11/05/19 16:30	11/15/19 06:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-4

Lab Sample ID: 500-172892-13

Date Collected: 11/04/19 15:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2-Methylnaphthalene	<0.079	*	0.079	0.0072	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Benzo[b]fluoranthene	0.010	J	0.039	0.0084	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Fluoranthene	0.0086	J	0.039	0.0072	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-4

Lab Sample ID: 500-172892-13

Date Collected: 11/04/19 15:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.046	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Phenanthrene	0.0066	J	0.039	0.0054	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Pyrene	0.010	J	0.039	0.0078	mg/Kg	☼	11/14/19 07:48	11/14/19 23:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	103		31 - 143				11/14/19 07:48	11/14/19 23:27	1
2-Fluorobiphenyl	84		43 - 145				11/14/19 07:48	11/14/19 23:27	1
2-Fluorophenol	83		31 - 166				11/14/19 07:48	11/14/19 23:27	1
Nitrobenzene-d5	68		37 - 147				11/14/19 07:48	11/14/19 23:27	1
Phenol-d5	72		30 - 153				11/14/19 07:48	11/14/19 23:27	1
Terphenyl-d14	91		42 - 157				11/14/19 07:48	11/14/19 23:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.1	0.22	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Arsenic	1.5		0.56	0.19	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Barium	18		0.56	0.064	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Beryllium	0.30		0.23	0.053	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Boron	9.2		2.8	0.26	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Cadmium	0.15	B	0.11	0.020	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Calcium	140000	B	110	19	mg/Kg	☼	11/14/19 17:35	11/18/19 13:14	10
Chromium	6.7		0.56	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Cobalt	5.2		0.28	0.074	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Copper	13		0.56	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Iron	8800		11	5.9	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Lead	7.4		0.28	0.13	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Magnesium	85000		56	28	mg/Kg	☼	11/14/19 17:35	11/18/19 13:14	10
Manganese	340		0.56	0.082	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Nickel	10		0.56	0.16	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Potassium	1200		28	10	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Selenium	0.58		0.56	0.33	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Silver	1.8		0.28	0.073	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Sodium	500		56	8.3	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Thallium	0.31	J	0.56	0.28	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Vanadium	10		0.28	0.067	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1
Zinc	28		1.1	0.50	mg/Kg	☼	11/14/19 17:35	11/15/19 15:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:17	1
Manganese	0.92		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

Client Sample ID: 3222V-6-B01-4

Lab Sample ID: 500-172892-13

Date Collected: 11/04/19 15:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:12	1
Barium	0.19	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:12	1
Boron	0.10		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:12	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:12	1
Calcium	28		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:12	1
Chromium	0.065		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:12	1
Cobalt	0.018	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:12	1
Iron	75		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:12	1
Lead	0.057		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:12	1
Manganese	0.55		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:12	1
Nickel	0.053		0.025	0.010	mg/L		11/08/19 15:02	11/13/19 19:49	1
Potassium	18		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:12	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:12	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:12	1
Zinc	0.22	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:12	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		11/08/19 15:02	11/12/19 17:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 17:59	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		11/12/19 09:20	11/13/19 10:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0091	J	0.020	0.0066	mg/Kg	☼	11/12/19 14:05	11/13/19 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.29	mg/Kg	☼	11/15/19 14:10	11/15/19 18:55	1
pH	8.6		0.2	0.2	SU			11/07/19 16:53	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172892-1

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 - AE7-029

Job ID: 500-172892-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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



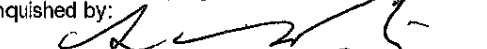



Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>AE7-29A</u> Project No.: <u>PTB/WO: 184-006/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD Other Sampler: <u>KEVIN MOORE / w. Klewicz</u>	COC No.: <u>1</u> of <u>2</u> Lab Job No.: <u>500-172892</u> Sample Temp: <u>2.5, 1.8</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES													
VOCS	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCS	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			Comments
1	3222V-6-1308			S	X	X					X	X	X	X	X				
1	3222V-6-1309-1	11-4-19	1510		↓	↓					↓	↓	↓	↓	↓				
2	3222V-6-1309-2		1515		↓	↓					↓	↓	↓	↓	↓				
3	3222V-6-1310-1		1500		↓	↓					↓	↓	↓	↓	↓				
4	3222V-6-1310-2		1505		↓	↓					↓	↓	↓	↓	↓				
5	3222V-6-1311-1		1440		↓	↓					↓	↓	↓	↓	↓				
6	3222V-6-1311-2		1445		↓	↓					↓	↓	↓	↓	↓				
7	3222V-6-1312		1425		↓	↓					↓	↓	↓	↓	↓				
8	3222V-6-1312 DUP		1430		↓	↓					↓	↓	↓	↓	↓				
9	TRIP BLANK #1	11-4-19			X														

Relinquished by: 	Date/Time: 11/4/19 5:30pm	Received by: 	Date/Time: 11/4/19 5:30pm
Relinquished by: 	Date/Time: 11/5/19 0910	Received by: 	Date/Time: 11/5/19 0910
Relinquished by: 	Date/Time: 11/5/19 1045	Received by: 	Date/Time: 11/5/19 1045

CHAIN OF CUSTODY RECORD

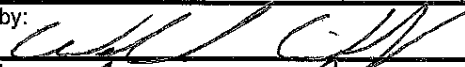
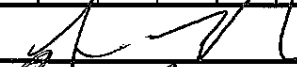




Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>AET-29A</u> Project No.: <u>PTB/WO: 184-006/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>KEVIN MOORE / W. Ulewicz</u>	COC No.: <u>2</u> of <u>2</u> Lab Job No.: <u>500-172892</u> Sample Temp: <u>2.6, 1.8</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds MAC, 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
10	3222V-6-801-1	11-4-19	1520	S	X	X					X	X	X	X	X	
11	3222V-6-801-2	↓	1525	↓	↓	↓					↓	↓	↓	↓	↓	
12	3222V-6-801-3	↓	1530	↓	↓	↓					↓	↓	↓	↓	↓	
13	3222V-6-801-4	↓	1535	↓	↓	↓					↓	↓	↓	↓	↓	

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
10	3222V-6-801-1	11-4-19	1520	S	X	X					X	X	X	X	X		
11	3222V-6-801-2	↓	1525	↓	↓	↓					↓	↓	↓	↓	↓		
12	3222V-6-801-3	↓	1530	↓	↓	↓					↓	↓	↓	↓	↓		
13	3222V-6-801-4	↓	1535	↓	↓	↓					↓	↓	↓	↓	↓		

Relinquished by: 	Date/Time: 11/4/19 5:30pm	Received by: 	Date/Time: 11/4/19 5:30pm
Relinquished by: 	Date/Time: 11/5/19 0910	Received by: 	Date/Time: 11/5/19 0910
Relinquished by: 	Date/Time: 11/5/19 1045	Received by: 	Date/Time: 11/5/19 1045

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172992-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/20/2019 4:46:55 PM

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

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172992-1

Client Sample ID: 3222V-6-B02

Lab Sample ID: 500-172992-1

Date Collected: 11/05/19 13:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Acetone	0.011	J	0.015	0.0066	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Methylene Chloride	0.0019	J	0.0038	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1
Xylenes, Total	0.00054	J	0.0030	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 00:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/06/19 19:45	11/16/19 00:11	1
4-Bromofluorobenzene (Surr)	89		75 - 131	11/06/19 19:45	11/16/19 00:11	1
Dibromofluoromethane	95		75 - 126	11/06/19 19:45	11/16/19 00:11	1
Toluene-d8 (Surr)	93		75 - 124	11/06/19 19:45	11/16/19 00:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172992-1

Client Sample ID: 3222V-6-B02

Lab Sample ID: 500-172992-1

Date Collected: 11/05/19 13:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Acenaphthylene	0.0052	J	0.039	0.0052	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Anthracene	0.0074	J	0.039	0.0066	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Benzo[a]anthracene	0.017	J	0.039	0.0053	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Benzo[a]pyrene	0.020	J	0.039	0.0076	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Benzo[b]fluoranthene	0.026	J	0.039	0.0085	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Benzo[g,h,i]perylene	0.020	J	0.039	0.013	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Chrysene	0.018	J	0.039	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Fluoranthene	0.026	J	0.039	0.0073	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172992-1

Client Sample ID: 3222V-6-B02

Lab Sample ID: 500-172992-1

Date Collected: 11/05/19 13:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.013	J	0.039	0.010	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Phenanthrene	0.020	J	0.039	0.0055	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Pyrene	0.024	J	0.039	0.0078	mg/Kg	☼	11/17/19 14:28	11/19/19 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	53		31 - 143				11/17/19 14:28	11/19/19 15:41	1
2-Fluorobiphenyl	76		43 - 145				11/17/19 14:28	11/19/19 15:41	1
2-Fluorophenol	101		31 - 166				11/17/19 14:28	11/19/19 15:41	1
Nitrobenzene-d5	73		37 - 147				11/17/19 14:28	11/19/19 15:41	1
Phenol-d5	90		30 - 153				11/17/19 14:28	11/19/19 15:41	1
Terphenyl-d14	86		42 - 157				11/17/19 14:28	11/19/19 15:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.50	J	1.2	0.23	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Arsenic	8.2		0.58	0.20	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Barium	70		0.58	0.066	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Beryllium	0.69		0.23	0.054	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Boron	11		2.9	0.27	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Cadmium	0.17		0.12	0.021	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Calcium	74000	B	120	20	mg/Kg	☼	11/15/19 08:51	11/18/19 11:31	10
Chromium	16		0.58	0.29	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Cobalt	13		0.29	0.076	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Copper	21		0.58	0.16	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Iron	23000		12	6.0	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Lead	19		0.29	0.13	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Magnesium	46000		58	29	mg/Kg	☼	11/15/19 08:51	11/18/19 11:31	10
Manganese	540		0.58	0.084	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Nickel	30		0.58	0.17	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Potassium	2500		29	10	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Selenium	0.49	J	0.58	0.34	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Silver	3.1		0.29	0.075	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Sodium	470		58	8.6	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Thallium	0.78		0.58	0.29	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Vanadium	22		0.29	0.069	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	1
Zinc	70		1.2	0.51	mg/Kg	☼	11/15/19 08:51	11/15/19 23:51	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		11/10/19 17:08	11/11/19 20:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/10/19 17:08	11/11/19 20:12	1
Chromium	<0.025		0.025	0.010	mg/L		11/10/19 17:08	11/11/19 20:12	1
Iron	<0.40		0.40	0.20	mg/L		11/10/19 17:08	11/11/19 20:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172992-1

Client Sample ID: 3222V-6-B02

Lab Sample ID: 500-172992-1

Date Collected: 11/05/19 13:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/10/19 17:08	11/11/19 20:12	1
Manganese	0.44		0.025	0.010	mg/L		11/10/19 17:08	11/11/19 20:12	1
Nickel	<0.025		0.025	0.010	mg/L		11/10/19 17:08	11/11/19 20:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.099		0.050	0.010	mg/L		11/10/19 17:05	11/12/19 00:36	1
Barium	0.71		0.50	0.050	mg/L		11/10/19 17:05	11/12/19 00:36	1
Beryllium	0.0073		0.0040	0.0040	mg/L		11/10/19 17:05	11/12/19 00:36	1
Boron	0.17		0.10	0.050	mg/L		11/10/19 17:05	11/12/19 00:36	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/10/19 17:05	11/12/19 00:36	1
Calcium	39		2.5	0.50	mg/L		11/10/19 17:05	11/12/19 00:36	1
Chromium	0.18		0.025	0.010	mg/L		11/10/19 17:05	11/12/19 00:36	1
Cobalt	0.082		0.025	0.010	mg/L		11/10/19 17:05	11/12/19 00:36	1
Iron	250		0.40	0.20	mg/L		11/10/19 17:05	11/12/19 00:36	1
Lead	0.13		0.0075	0.0075	mg/L		11/10/19 17:05	11/12/19 00:36	1
Manganese	1.3		0.025	0.010	mg/L		11/10/19 17:05	11/12/19 00:36	1
Nickel	0.26		0.025	0.010	mg/L		11/10/19 17:05	11/12/19 00:36	1
Potassium	31		2.5	0.50	mg/L		11/10/19 17:05	11/12/19 00:36	1
Selenium	<0.050		0.050	0.020	mg/L		11/10/19 17:05	11/12/19 00:36	1
Silver	0.018	J	0.025	0.010	mg/L		11/10/19 17:05	11/12/19 00:36	1
Zinc	0.65		0.50	0.020	mg/L		11/10/19 17:05	11/12/19 00:36	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		11/10/19 17:08	11/20/19 12:22	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		11/10/19 17:05	11/20/19 11:43	1
Thallium	0.0038		0.0020	0.0020	mg/L		11/10/19 17:05	11/19/19 21:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00024		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.019	0.0062	mg/Kg	☼	11/08/19 12:05	11/11/19 08:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.24	mg/Kg	☼	11/19/19 09:45	11/19/19 14:45	1
pH	8.3		0.2	0.2	SU			11/08/19 17:01	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172992-1

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.

Metals

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

Glossary

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172992-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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

ANALYTICAL REPORT

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

Laboratory Job ID: 500-173122-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/23/2019 9:01:47 AM

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

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B03

Lab Sample ID: 500-173122-1

Date Collected: 11/06/19 12:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/07/19 18:30	11/19/19 17:35	1
4-Bromofluorobenzene (Surr)	97		75 - 131	11/07/19 18:30	11/19/19 17:35	1
Dibromofluoromethane	93		75 - 126	11/07/19 18:30	11/19/19 17:35	1
Toluene-d8 (Surr)	92		75 - 124	11/07/19 18:30	11/19/19 17:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B03

Lab Sample ID: 500-173122-1

Date Collected: 11/06/19 12:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Acenaphthylene	0.020	J	0.037	0.0050	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Anthracene	0.015	J	0.037	0.0063	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Benzo[a]anthracene	0.076		0.037	0.0051	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Benzo[a]pyrene	0.12		0.037	0.0073	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Benzo[b]fluoranthene	0.19		0.037	0.0081	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Benzo[g,h,i]perylene	0.066		0.037	0.012	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Benzo[k]fluoranthene	0.066		0.037	0.011	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Chrysene	0.10		0.037	0.010	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Dibenz(a,h)anthracene	0.023	J	0.037	0.0073	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Fluoranthene	0.14		0.037	0.0070	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B03

Lab Sample ID: 500-173122-1

Date Collected: 11/06/19 12:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.064		0.037	0.0098	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Phenanthrene	0.047		0.037	0.0053	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Pyrene	0.18		0.037	0.0075	mg/Kg	☼	11/18/19 19:38	11/22/19 12:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		31 - 143				11/18/19 19:38	11/22/19 12:33	1
2-Fluorobiphenyl	79		43 - 145				11/18/19 19:38	11/22/19 12:33	1
2-Fluorophenol	66		31 - 166				11/18/19 19:38	11/22/19 12:33	1
Nitrobenzene-d5	62		37 - 147				11/18/19 19:38	11/22/19 12:33	1
Phenol-d5	69		30 - 153				11/18/19 19:38	11/22/19 12:33	1
Terphenyl-d14	114		42 - 157				11/18/19 19:38	11/22/19 12:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.88	J	1.1	0.22	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Arsenic	6.8		0.56	0.19	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Barium	41		0.56	0.064	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Beryllium	0.35		0.22	0.052	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Boron	8.0	B	2.8	0.26	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Cadmium	0.32	B	0.11	0.020	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Calcium	120000	B	110	19	mg/Kg	☼	11/19/19 17:49	11/20/19 15:51	10
Chromium	11	B	0.56	0.28	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Cobalt	5.8		0.28	0.073	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Copper	18		0.56	0.16	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Iron	11000	B	11	5.8	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Lead	32		0.28	0.13	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Magnesium	72000		56	28	mg/Kg	☼	11/19/19 17:49	11/20/19 15:51	10
Manganese	380	B	0.56	0.081	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Nickel	13		0.56	0.16	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Potassium	980		28	9.9	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Selenium	0.55	J	0.56	0.33	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Silver	1.8		0.28	0.072	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Sodium	340		56	8.3	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Thallium	0.37	J	0.56	0.28	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Vanadium	14		0.28	0.066	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1
Zinc	54		1.1	0.49	mg/Kg	☼	11/19/19 17:49	11/20/19 12:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.49	J *	0.70	0.20	mg/L		11/15/19 15:20	11/19/19 02:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:20	11/19/19 02:18	1
Manganese	0.36		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B03

Lab Sample ID: 500-173122-1

Date Collected: 11/06/19 12:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.026	J	0.050	0.010	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Barium	0.40	J	0.50	0.050	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Boron	0.067	J	0.10	0.050	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Calcium	20		2.5	0.50	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Chromium	0.084		0.025	0.010	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Cobalt	0.015	J	0.025	0.010	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Iron	71		0.40	0.20	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Lead	0.070		0.0075	0.0075	mg/L	-	11/15/19 15:21	11/19/19 13:17	1
Manganese	0.55		0.025	0.010	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Nickel	0.059		0.025	0.010	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Potassium	10		2.5	0.50	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Silver	<0.025		0.025	0.010	mg/L	-	11/15/19 15:21	11/19/19 00:34	1
Zinc	0.38	J	0.50	0.020	mg/L	-	11/15/19 15:21	11/19/19 00:34	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	-	11/15/19 15:21	11/20/19 14:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/15/19 15:21	11/20/19 14:16	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	-	11/18/19 10:10	11/19/19 10:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058		0.018	0.0061	mg/Kg	☼	11/15/19 14:20	11/18/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.28	mg/Kg	☼	11/20/19 14:10	11/20/19 17:29	1
pH	8.1		0.2	0.2	SU			11/13/19 14:32	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05

Lab Sample ID: 500-173122-3

Date Collected: 11/06/19 12:40

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 77.1

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	☼	11/07/19 18:30	11/19/19 18:27	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
2-Butanone (MEK)	0.0087		0.0048	0.0021	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Acetone	0.046		0.019	0.0083	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	11/07/19 18:30	11/19/19 18:27	1
4-Bromofluorobenzene (Surr)	99		75 - 131	11/07/19 18:30	11/19/19 18:27	1
Dibromofluoromethane	90		75 - 126	11/07/19 18:30	11/19/19 18:27	1
Toluene-d8 (Surr)	94		75 - 124	11/07/19 18:30	11/19/19 18:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05

Lab Sample ID: 500-173122-3

Date Collected: 11/06/19 12:40

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 77.1

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	0.095	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2,4-Dinitrophenol	<0.84		0.84	0.74	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2-Methylnaphthalene	0.021	J	0.084	0.0077	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Acenaphthylene	0.22		0.041	0.0055	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Anthracene	0.077		0.041	0.0070	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Benzo[a]anthracene	0.19		0.041	0.0056	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Benzo[a]pyrene	0.32		0.041	0.0081	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Benzo[b]fluoranthene	0.40		0.041	0.0090	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Benzo[g,h,i]perylene	0.20		0.041	0.013	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Benzo[k]fluoranthene	0.16		0.041	0.012	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Chrysene	0.27		0.041	0.011	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Dibenz(a,h)anthracene	0.065		0.041	0.0081	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Fluoranthene	0.22		0.041	0.0077	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Fluorene	0.050		0.041	0.0059	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05

Lab Sample ID: 500-173122-3

Date Collected: 11/06/19 12:40

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 77.1

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	0.15		0.041	0.011	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Naphthalene	0.016	J	0.041	0.0064	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Phenanthrene	0.17		0.041	0.0058	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Pyrene	0.42		0.041	0.0083	mg/Kg	☼	11/18/19 19:38	11/22/19 13:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	98		31 - 143				11/18/19 19:38	11/22/19 13:21	1
2-Fluorobiphenyl	71		43 - 145				11/18/19 19:38	11/22/19 13:21	1
2-Fluorophenol	60		31 - 166				11/18/19 19:38	11/22/19 13:21	1
Nitrobenzene-d5	57		37 - 147				11/18/19 19:38	11/22/19 13:21	1
Phenol-d5	59		30 - 153				11/18/19 19:38	11/22/19 13:21	1
Terphenyl-d14	97		42 - 157				11/18/19 19:38	11/22/19 13:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	1.2	0.24	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Arsenic	7.2		0.62	0.21	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Barium	100		0.62	0.071	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Beryllium	0.66		0.25	0.058	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Boron	6.3	B	3.1	0.29	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Cadmium	0.32	B	0.12	0.022	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Calcium	12000	B	12	2.1	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Chromium	21	B	0.62	0.31	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Cobalt	8.0		0.31	0.082	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Copper	21		0.62	0.17	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Iron	16000	B	12	6.5	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Lead	38		0.31	0.14	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Magnesium	8300		6.2	3.1	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Manganese	350	B	0.62	0.091	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Nickel	23		0.62	0.18	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Potassium	1600		31	11	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Selenium	<0.62		0.62	0.37	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Silver	3.8		0.31	0.081	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Sodium	980		62	9.2	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Thallium	1.0		0.62	0.31	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Vanadium	26		0.31	0.074	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	1
Zinc	110		1.2	0.55	mg/Kg	☼	11/19/19 17:49	11/20/19 13:03	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		11/15/19 15:20	11/19/19 02:26	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:26	1
Iron	<0.70	*	0.70	0.20	mg/L		11/15/19 15:20	11/19/19 02:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:20	11/19/19 02:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05

Lab Sample ID: 500-173122-3

Date Collected: 11/06/19 12:40

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	8.7		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:26	1
Nickel	0.031	B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.052		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:42	1
Barium	0.69		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:42	1
Beryllium	0.0040		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:42	1
Boron	0.12		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:42	1
Calcium	18		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:42	1
Chromium	0.13		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:42	1
Cobalt	0.047		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:42	1
Iron	130		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:42	1
Lead	0.17		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 13:25	1
Manganese	1.6		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:42	1
Nickel	0.13		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:42	1
Potassium	20		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:42	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:42	1
Silver	0.010	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:42	1
Zinc	0.56		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:42	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		11/15/19 15:20	11/20/19 18:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 14:22	1
Thallium	0.0029		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.021	0.0069	mg/Kg	☼	11/15/19 14:20	11/18/19 09:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.29	mg/Kg	☼	11/20/19 14:10	11/20/19 17:32	1
pH	7.4		0.2	0.2	SU			11/13/19 14:34	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05 Dup

Lab Sample ID: 500-173122-4

Date Collected: 11/06/19 12:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Acetone	0.014	J	0.017	0.0075	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 18:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/07/19 18:30	11/19/19 18:52	1
4-Bromofluorobenzene (Surr)	97		75 - 131	11/07/19 18:30	11/19/19 18:52	1
Dibromofluoromethane	92		75 - 126	11/07/19 18:30	11/19/19 18:52	1
Toluene-d8 (Surr)	92		75 - 124	11/07/19 18:30	11/19/19 18:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05 Dup

Lab Sample ID: 500-173122-4

Date Collected: 11/06/19 12:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2-Methylnaphthalene	0.011	J	0.079	0.0072	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Acenaphthylene	0.058		0.039	0.0052	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Anthracene	0.033	J	0.039	0.0066	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Benzo[a]anthracene	0.079		0.039	0.0053	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Benzo[a]pyrene	0.11		0.039	0.0076	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Benzo[b]fluoranthene	0.13		0.039	0.0085	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Benzo[g,h,i]perylene	0.070		0.039	0.013	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Benzo[k]fluoranthene	0.090		0.039	0.012	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Chrysene	0.10		0.039	0.011	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Dibenz(a,h)anthracene	0.012	J	0.039	0.0076	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Fluoranthene	0.17		0.039	0.0073	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Fluorene	0.0094	J	0.039	0.0055	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05 Dup

Lab Sample ID: 500-173122-4

Date Collected: 11/06/19 12:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.0

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	0.060		0.039	0.010	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Naphthalene	0.0077	J	0.039	0.0060	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Phenanthrene	0.070		0.039	0.0055	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Pyrene	0.18		0.039	0.0078	mg/Kg	☼	11/18/19 19:38	11/22/19 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		31 - 143				11/18/19 19:38	11/22/19 13:45	1
2-Fluorobiphenyl	80		43 - 145				11/18/19 19:38	11/22/19 13:45	1
2-Fluorophenol	70		31 - 166				11/18/19 19:38	11/22/19 13:45	1
Nitrobenzene-d5	71		37 - 147				11/18/19 19:38	11/22/19 13:45	1
Phenol-d5	69		30 - 153				11/18/19 19:38	11/22/19 13:45	1
Terphenyl-d14	109		42 - 157				11/18/19 19:38	11/22/19 13:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.71	J	1.2	0.23	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Arsenic	7.4		0.58	0.20	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Barium	66		0.58	0.066	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Beryllium	0.60		0.23	0.054	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Boron	7.2	B	2.9	0.27	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Cadmium	0.28	B	0.12	0.021	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Calcium	62000	B	120	20	mg/Kg	☼	11/19/19 17:49	11/20/19 16:03	10
Chromium	13	B	0.58	0.29	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Cobalt	9.7		0.29	0.076	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Copper	18		0.58	0.16	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Iron	16000	B	12	6.0	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Lead	46		0.29	0.13	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Magnesium	30000		5.8	2.9	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Manganese	570	B	0.58	0.084	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Nickel	24		0.58	0.17	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Potassium	1500		29	10	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Silver	2.6		0.29	0.075	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Sodium	760		58	8.6	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Thallium	0.70		0.58	0.29	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Vanadium	19		0.29	0.068	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	1
Zinc	100		1.2	0.51	mg/Kg	☼	11/19/19 17:49	11/20/19 13:07	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		11/15/19 15:20	11/19/19 02:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 02:30	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:30	1
Iron	0.63	J *	0.70	0.20	mg/L		11/15/19 15:20	11/19/19 02:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B05 Dup

Lab Sample ID: 500-173122-4

Date Collected: 11/06/19 12:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.0

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		11/15/19 15:20	11/19/19 02:30	1
Manganese	10		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:30	1
Nickel	0.032	B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.066		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:46	1
Barium	0.71		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:46	1
Beryllium	0.0056		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:46	1
Boron	0.13		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:46	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:46	1
Calcium	22		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:46	1
Chromium	0.13		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:46	1
Cobalt	0.062		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:46	1
Iron	150		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:46	1
Lead	0.19		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 13:29	1
Manganese	2.0		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:46	1
Nickel	0.17		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:46	1
Potassium	21		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:46	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:46	1
Silver	0.012	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:46	1
Zinc	0.58		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:46	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		11/15/19 15:20	11/20/19 18:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 14:25	1
Thallium	0.0035		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00030		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.019	0.0063	mg/Kg	☼	11/15/19 14:20	11/18/19 09:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	11/20/19 14:10	11/20/19 17:33	1
pH	7.6		0.2	0.2	SU			11/13/19 14:35	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B06

Lab Sample ID: 500-173122-5

Date Collected: 11/06/19 13:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 19:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/07/19 18:30	11/19/19 19:18	1
4-Bromofluorobenzene (Surr)	97		75 - 131	11/07/19 18:30	11/19/19 19:18	1
Dibromofluoromethane	90		75 - 126	11/07/19 18:30	11/19/19 19:18	1
Toluene-d8 (Surr)	92		75 - 124	11/07/19 18:30	11/19/19 19:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B06

Lab Sample ID: 500-173122-5

Date Collected: 11/06/19 13:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Benzo[a]anthracene	0.034	J	0.039	0.0053	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Benzo[a]pyrene	0.044		0.039	0.0076	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Benzo[b]fluoranthene	0.033	J	0.039	0.0085	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Benzo[g,h,i]perylene	0.041		0.039	0.013	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Benzo[k]fluoranthene	0.066		0.039	0.012	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Chrysene	0.049		0.039	0.011	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Fluoranthene	0.077		0.039	0.0073	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B06

Lab Sample ID: 500-173122-5

Date Collected: 11/06/19 13:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.036	J	0.039	0.010	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Phenanthrene	0.029	J	0.039	0.0055	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Pyrene	0.074		0.039	0.0078	mg/Kg	☼	11/18/19 19:38	11/22/19 10:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		31 - 143				11/18/19 19:38	11/22/19 10:09	1
2-Fluorobiphenyl	80		43 - 145				11/18/19 19:38	11/22/19 10:09	1
2-Fluorophenol	71		31 - 166				11/18/19 19:38	11/22/19 10:09	1
Nitrobenzene-d5	66		37 - 147				11/18/19 19:38	11/22/19 10:09	1
Phenol-d5	69		30 - 153				11/18/19 19:38	11/22/19 10:09	1
Terphenyl-d14	99		42 - 157				11/18/19 19:38	11/22/19 10:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J	1.1	0.22	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Arsenic	8.2		0.57	0.20	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Barium	64		0.57	0.066	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Beryllium	0.70		0.23	0.054	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Boron	9.0	B	2.9	0.27	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Cadmium	0.18	B	0.11	0.021	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Calcium	33000	B	11	1.9	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Chromium	17	B	0.57	0.28	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Cobalt	12		0.29	0.075	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Copper	21		0.57	0.16	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Iron	21000	B	11	6.0	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Lead	16		0.29	0.13	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Magnesium	20000		5.7	2.9	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Manganese	480	B	0.57	0.083	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Nickel	29		0.57	0.17	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Potassium	2000		29	10	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Silver	3.1		0.29	0.074	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Sodium	520		57	8.5	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Thallium	0.93		0.57	0.29	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Vanadium	25		0.29	0.068	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	1
Zinc	72		1.1	0.50	mg/Kg	☼	11/19/19 17:49	11/20/19 13:11	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		11/15/19 15:20	11/19/19 02:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 02:35	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:35	1
Iron	<0.70	*	0.70	0.20	mg/L		11/15/19 15:20	11/19/19 02:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B06

Lab Sample ID: 500-173122-5

Date Collected: 11/06/19 13:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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		11/15/19 15:20	11/19/19 02:35	1
Manganese	0.086		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:35	1
Nickel	0.014	J B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.087		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:50	1
Barium	0.75		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:50	1
Beryllium	0.0079		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:50	1
Boron	0.17		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:50	1
Calcium	39		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:50	1
Chromium	0.18		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:50	1
Cobalt	0.060		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:50	1
Iron	220		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:50	1
Lead	0.093		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 13:33	1
Manganese	1.3		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:50	1
Nickel	0.23		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:50	1
Potassium	30		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:50	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:50	1
Silver	0.019	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:50	1
Zinc	0.65		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:50	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		11/15/19 15:20	11/20/19 18:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 14:34	1
Thallium	0.0050		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00039		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.019	0.0063	mg/Kg	☼	11/15/19 14:20	11/18/19 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	11/20/19 14:10	11/20/19 17:33	1
pH	8.2		0.2	0.2	SU			11/13/19 14:37	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B07

Lab Sample ID: 500-173122-6

Date Collected: 11/06/19 13:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/07/19 18:30	11/19/19 19:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	11/07/19 18:30	11/19/19 19:44	1
4-Bromofluorobenzene (Surr)	95		75 - 131	11/07/19 18:30	11/19/19 19:44	1
Dibromofluoromethane	92		75 - 126	11/07/19 18:30	11/19/19 19:44	1
Toluene-d8 (Surr)	91		75 - 124	11/07/19 18:30	11/19/19 19:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B07

Lab Sample ID: 500-173122-6

Date Collected: 11/06/19 13:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Acenaphthene	0.0078	J	0.040	0.0072	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Acenaphthylene	0.0086	J	0.040	0.0053	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Anthracene	0.027	J	0.040	0.0067	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Benzo[a]anthracene	0.22		0.040	0.0054	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Benzo[a]pyrene	0.42		0.040	0.0077	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Benzo[b]fluoranthene	0.53		0.040	0.0086	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Benzo[g,h,i]perylene	0.21		0.040	0.013	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Benzo[k]fluoranthene	0.31		0.040	0.012	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Chrysene	0.29		0.040	0.011	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Dibenz(a,h)anthracene	0.032	J	0.040	0.0077	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Fluoranthene	0.44		0.040	0.0074	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Fluorene	0.0072	J	0.040	0.0056	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B07

Lab Sample ID: 500-173122-6

Date Collected: 11/06/19 13:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.19		0.040	0.010	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Phenanthrene	0.15		0.040	0.0056	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Pyrene	0.63		0.040	0.0079	mg/Kg	☼	11/18/19 19:38	11/22/19 14:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	108		31 - 143				11/18/19 19:38	11/22/19 14:09	1
2-Fluorobiphenyl	103		43 - 145				11/18/19 19:38	11/22/19 14:09	1
2-Fluorophenol	78		31 - 166				11/18/19 19:38	11/22/19 14:09	1
Nitrobenzene-d5	71		37 - 147				11/18/19 19:38	11/22/19 14:09	1
Phenol-d5	72		30 - 153				11/18/19 19:38	11/22/19 14:09	1
Terphenyl-d14	134		42 - 157				11/18/19 19:38	11/22/19 14:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J	1.1	0.22	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Arsenic	6.9		0.56	0.19	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Barium	70		0.56	0.064	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Beryllium	0.66		0.23	0.053	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Boron	8.2	B	2.8	0.26	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Cadmium	0.26	B	0.11	0.020	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Calcium	51000	B	110	19	mg/Kg	☼	11/19/19 17:49	11/20/19 16:08	10
Chromium	21	B	0.56	0.28	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Cobalt	11		0.28	0.074	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Copper	23		0.56	0.16	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Iron	17000	B	11	5.9	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Lead	39		0.28	0.13	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Magnesium	25000		5.6	2.8	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Manganese	480	B	0.56	0.082	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Nickel	24		0.56	0.16	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Potassium	1600		28	10	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Silver	2.7		0.28	0.073	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Sodium	530		56	8.3	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Thallium	0.50	J	0.56	0.28	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Vanadium	23		0.28	0.066	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	1
Zinc	88		1.1	0.49	mg/Kg	☼	11/19/19 17:49	11/20/19 13:22	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		11/15/19 15:20	11/19/19 02:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 02:39	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:39	1
Iron	<0.70	*	0.70	0.20	mg/L		11/15/19 15:20	11/19/19 02:39	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B07

Lab Sample ID: 500-173122-6

Date Collected: 11/06/19 13:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:20	11/19/19 02:39	1
Manganese	0.22		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:39	1
Nickel	0.016	J B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:39	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		11/15/19 15:21	11/19/19 00:54	1
Barium	0.60		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:54	1
Beryllium	0.0051		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:54	1
Boron	0.16		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:54	1
Calcium	26		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:54	1
Chromium	0.14		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:54	1
Cobalt	0.038		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:54	1
Iron	150		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:54	1
Lead	0.076		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 13:37	1
Manganese	0.89		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:54	1
Nickel	0.15		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:54	1
Potassium	23		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:54	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:54	1
Silver	0.011	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:54	1
Zinc	0.70		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:54	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		11/15/19 15:20	11/20/19 18:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 14:37	1
Thallium	0.0035		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00026		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043		0.019	0.0065	mg/Kg	☼	11/15/19 14:20	11/18/19 09:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.30	mg/Kg	☼	11/20/19 14:10	11/20/19 17:33	1
pH	8.1		0.2	0.2	SU			11/13/19 14:38	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B08

Lab Sample ID: 500-173122-7

Date Collected: 11/06/19 14:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	11/07/19 18:30	11/19/19 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	11/07/19 18:30	11/19/19 20:09	1
4-Bromofluorobenzene (Surr)	96		75 - 131	11/07/19 18:30	11/19/19 20:09	1
Dibromofluoromethane	92		75 - 126	11/07/19 18:30	11/19/19 20:09	1
Toluene-d8 (Surr)	92		75 - 124	11/07/19 18:30	11/19/19 20:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B08

Lab Sample ID: 500-173122-7

Date Collected: 11/06/19 14:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Acenaphthylene	0.046		0.039	0.0052	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Anthracene	0.017 J		0.039	0.0066	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Benzo[a]anthracene	0.032 J		0.039	0.0053	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Benzo[a]pyrene	0.053		0.039	0.0076	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Benzo[b]fluoranthene	0.052		0.039	0.0085	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Benzo[g,h,i]perylene	0.063		0.039	0.013	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Benzo[k]fluoranthene	0.045		0.039	0.012	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Fluoranthene	0.054		0.039	0.0073	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Fluorene	0.0063 J		0.039	0.0055	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B08

Lab Sample ID: 500-173122-7

Date Collected: 11/06/19 14:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.039		0.039	0.010	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Phenanthrene	0.024	J	0.039	0.0055	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Pyrene	0.068		0.039	0.0078	mg/Kg	☼	11/18/19 19:38	11/22/19 10:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		31 - 143				11/18/19 19:38	11/22/19 10:57	1
2-Fluorobiphenyl	79		43 - 145				11/18/19 19:38	11/22/19 10:57	1
2-Fluorophenol	67		31 - 166				11/18/19 19:38	11/22/19 10:57	1
Nitrobenzene-d5	64		37 - 147				11/18/19 19:38	11/22/19 10:57	1
Phenol-d5	67		30 - 153				11/18/19 19:38	11/22/19 10:57	1
Terphenyl-d14	94		42 - 157				11/18/19 19:38	11/22/19 10:57	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J	1.2	0.23	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Arsenic	10		0.59	0.20	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Barium	62		0.59	0.067	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Beryllium	0.72		0.24	0.055	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Boron	8.6	B	3.0	0.28	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Cadmium	0.29	B	0.12	0.021	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Calcium	56000	B	120	20	mg/Kg	☼	11/19/19 17:49	11/20/19 16:12	10
Chromium	16	B	0.59	0.29	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Cobalt	14		0.30	0.078	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Copper	46		0.59	0.17	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Iron	22000	B	12	6.2	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Lead	33		0.30	0.14	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Magnesium	26000		5.9	2.9	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Manganese	540	B	0.59	0.086	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Nickel	33		0.59	0.17	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Potassium	2000		30	10	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Silver	2.9		0.30	0.076	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Sodium	440		59	8.8	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Thallium	1.0		0.59	0.30	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Vanadium	23		0.30	0.070	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	1
Zinc	100		1.2	0.52	mg/Kg	☼	11/19/19 17:49	11/20/19 11:31	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		11/15/19 15:20	11/19/19 03:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 03:04	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 03:04	1
Iron	<0.70	*	0.70	0.20	mg/L		11/15/19 15:20	11/19/19 03:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Client Sample ID: 3222V-6-B08

Lab Sample ID: 500-173122-7

Date Collected: 11/06/19 14:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:20	11/19/19 03:04	1
Manganese	0.093		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 03:04	1
Nickel	0.014	J B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 03:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.097		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:58	1
Barium	0.64		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:58	1
Beryllium	0.0060		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:58	1
Boron	0.14		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:58	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:58	1
Calcium	29		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:58	1
Chromium	0.16		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:58	1
Cobalt	0.055		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:58	1
Iron	220		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:58	1
Lead	0.16		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 13:41	1
Manganese	1.0		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:58	1
Nickel	0.21		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:58	1
Potassium	26	F1	2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:58	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:58	1
Silver	0.014	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:58	1
Zinc	0.79		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:58	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		11/15/19 15:20	11/20/19 18:54	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		11/15/19 15:21	11/20/19 14:40	1
Thallium	0.0056		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00042		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.019	0.0062	mg/Kg	☼	11/15/19 14:20	11/18/19 09:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	11/20/19 10:45	11/20/19 15:39	1
pH	8.2		0.2	0.2	SU			11/13/19 14:39	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173122-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 - AE7-029

Job ID: 500-173122-1

Laboratory: Eurofins TestAmerica, Chicago


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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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 500-173122 COC Contact: Colleen Grey email: cgrey@andrews-eng.com		Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>ACT-29A</u> Project No.: <u>PTB/WO: 184-006/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD Other Sampler: <u>KEVIN MOORE / w. Ulewicz</u>	COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>500-173122</u> Sample Temp: <u>33.316</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds MAC, 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			
	3222V-6-1301			S	X	X					X	X	X	X	X				
	3222V-6-1301-2																		
	3222V-6-1301-3																		
	3222V-6-1301-4																		
	3222V-6-1302																		
1	3222V-6-1303	11-6-19	1230	S															
2	3222V-6-1304		1235																
3	3222V-6-1305		1240																
4	3222V-6-1305 (Dup)		1245																
5	3222V-6-1306		1330																
6	3222V-6-1307		1345																
7	3222V-6-808		1415																

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
	3222V-6-1301			S	X	X					X	X	X	X	X					
	3222V-6-1301-2																			
	3222V-6-1301-3																			
	3222V-6-1301-4																			
	3222V-6-1302																			
1	3222V-6-1303	11-6-19	1230	S																
2	3222V-6-1304		1235																	
3	3222V-6-1305		1240																	
4	3222V-6-1305 (Dup)		1245																	
5	3222V-6-1306		1330																	
6	3222V-6-1307		1345																	
7	3222V-6-808		1415																	

Relinquished by: 	Date/Time: 11/6/19 6:00 PM	Received by: 	Date/Time: 11/6/19 6:00 PM
Relinquished by: 	Date/Time: 11/21/19 09:10	Received by: 	Date/Time: 11/21/19 09:10
Relinquished by: 	Date/Time: 11/21/19 11:05	Received by: 	Date/Time: 11/21/19 11:23 AM



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

1100-1200 blocks of West Bartlett Road (northwest corner of Bartlett Road and Sutton Road)

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99479 Longitude: -88.20731
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 1,807

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 3222V-7-B01, -B02, -B04, -B05, -B06, -B07, -B08, -B10 AND -B11 WERE SAMPLED ADJACENT TO SITE 3222V-7. SEE TABLE 3c AND FIGURES 2 AND 4 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-172993-1 AND 500-173121-1.

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:

Jan 12, 2022

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

ISGS Site 3222V-7
Agricultural Land

Sample ID	3222V-7-B01	3222V-7-B02	3222V-7-B04	3222V-7-B05	3222V-7-B06-1	Maximum Allowable Concentration					
Sample Depth (ft)	0-4	0-4	0-4	0-4	0-5						
Sample Date	11/5/2019	11/5/2019	11/5/2019	11/5/2019	11/6/2019	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	
PID	0	0	0	0	0						
Sample pH	8.5	8.1	7.7	7.2	8.6						
Matrix	Soil	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	0.058	J 0.0087	0.27	1,2	ND	0.065	0.09	0.09	0.98	1.3	2.1

Sample ID	3222V-7-B06-2	3222V-7-B06-3	3222V-7-B07	3222V-7-B08	3222V-7-B08 DUP	Maximum Allowable Concentration				
Sample Depth (ft)	5-10	10-15	0-3	0-3	0-3					
Sample Date	11/6/2019	11/6/2019	11/6/2019	11/6/2019	11/6/2019	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
PID	0	0	0	0	0					
Sample pH	8.4	8.5	7.8	8.1	7.7					
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	J 0.021	ND	J 0.035	0.073	J 0.02	0.09	0.09	0.98	1.3	2.1

Sample ID	3222V-7-B10	3222V-7-B11	Maximum Allowable Concentration				
Sample Depth (ft)	0-3	0-3					
Sample Date	11/6/2019	11/6/2019	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
PID	0	0					
Sample pH	8.2	8.1					
Matrix	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	J 0.028	0.058	0.09	0.09	0.98	1.3	2.1

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172993-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/20/2019 4:48:27 PM

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

LINKS

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B01

Lab Sample ID: 500-172993-1

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Chloroethane	<0.0044 *		0.0044	0.0013	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Methylene Chloride	0.0020 J		0.0044	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Vinyl chloride	<0.0018		0.0018	0.00077	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 03:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/06/19 19:45	11/16/19 03:07	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/06/19 19:45	11/16/19 03:07	1
Dibromofluoromethane	93		75 - 126	11/06/19 19:45	11/16/19 03:07	1
Toluene-d8 (Surr)	97		75 - 124	11/06/19 19:45	11/16/19 03:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B01

Lab Sample ID: 500-172993-1

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Acenaphthylene	0.0053	J	0.039	0.0051	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Anthracene	0.0099	J	0.039	0.0065	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Benzo[a]anthracene	0.043		0.039	0.0053	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Benzo[a]pyrene	0.058		0.039	0.0076	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Benzo[b]fluoranthene	0.090		0.039	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Benzo[g,h,i]perylene	0.036	J	0.039	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Benzo[k]fluoranthene	0.025	J	0.039	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Chrysene	0.053		0.039	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Dibenz(a,h)anthracene	0.013	J	0.039	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Fluoranthene	0.084		0.039	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B01

Lab Sample ID: 500-172993-1

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.7

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	0.030	J	0.039	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Phenanthrene	0.030	J	0.039	0.0054	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Pyrene	0.073		0.039	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		31 - 143				11/16/19 18:01	11/19/19 18:19	1
2-Fluorobiphenyl	77		43 - 145				11/16/19 18:01	11/19/19 18:19	1
2-Fluorophenol	55		31 - 166				11/16/19 18:01	11/19/19 18:19	1
Nitrobenzene-d5	60		37 - 147				11/16/19 18:01	11/19/19 18:19	1
Phenol-d5	55		30 - 153				11/16/19 18:01	11/19/19 18:19	1
Terphenyl-d14	98		42 - 157				11/16/19 18:01	11/19/19 18:19	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.1	0.22	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Arsenic	8.1		0.55	0.19	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Barium	60		0.55	0.063	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Beryllium	0.59		0.22	0.052	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Boron	13		2.8	0.26	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Cadmium	0.19	B	0.11	0.020	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Calcium	69000	B	110	19	mg/Kg	☼	11/15/19 08:30	11/18/19 09:55	10
Chromium	16		0.55	0.27	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Cobalt	12		0.28	0.073	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Copper	22		0.55	0.16	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Iron	21000	B	11	5.8	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Lead	15		0.28	0.13	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Magnesium	32000		5.5	2.7	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Manganese	460		0.55	0.080	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Nickel	29		0.55	0.16	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Potassium	2900		28	9.8	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Selenium	0.58		0.55	0.33	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Silver	2.8		0.28	0.071	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Sodium	550		55	8.2	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Thallium	1.2		0.55	0.28	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Vanadium	22		0.28	0.065	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	1
Zinc	69		1.1	0.49	mg/Kg	☼	11/15/19 08:30	11/16/19 03:02	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		11/14/19 15:55	11/15/19 21:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 21:56	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:56	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B01

Lab Sample ID: 500-172993-1

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.7

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		11/14/19 15:55	11/15/19 21:56	1
Manganese	0.049		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:56	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.078		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 15:25	1
Barium	0.62		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 15:25	1
Beryllium	0.0076		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 15:25	1
Boron	0.19		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 15:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 15:25	1
Calcium	36		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:25	1
Chromium	0.15		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:25	1
Cobalt	0.054		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:25	1
Iron	180		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 15:25	1
Lead	0.087		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 15:25	1
Manganese	1.2		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:25	1
Nickel	0.20 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:25	1
Potassium	32		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:25	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 15:25	1
Silver	0.016 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:25	1
Zinc	0.56		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 15:25	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		11/14/19 15:55	11/19/19 04:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:43	1
Thallium	0.0037		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00031		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0062	mg/Kg	☼	11/08/19 12:05	11/11/19 09:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	11/19/19 13:10	11/19/19 16:14	1
pH	8.5		0.2	0.2	SU			11/08/19 17:05	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B02

Lab Sample ID: 500-172993-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Chloroethane	<0.0047 *		0.0047	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Methylene Chloride	0.0030	J	0.0047	0.0018	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/06/19 19:45	11/16/19 03:32	1
4-Bromofluorobenzene (Surr)	94		75 - 131	11/06/19 19:45	11/16/19 03:32	1
Dibromofluoromethane	90		75 - 126	11/06/19 19:45	11/16/19 03:32	1
Toluene-d8 (Surr)	97		75 - 124	11/06/19 19:45	11/16/19 03:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B02

Lab Sample ID: 500-172993-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Benzo[a]anthracene	0.0072	J	0.039	0.0053	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Benzo[a]pyrene	0.0087	J	0.039	0.0076	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Fluoranthene	0.0096	J	0.039	0.0073	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B02

Lab Sample ID: 500-172993-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1
Pyrene	0.0086	J	0.039	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	68		31 - 143	11/16/19 18:01	11/19/19 17:32	1
2-Fluorobiphenyl	79		43 - 145	11/16/19 18:01	11/19/19 17:32	1
2-Fluorophenol	58		31 - 166	11/16/19 18:01	11/19/19 17:32	1
Nitrobenzene-d5	63		37 - 147	11/16/19 18:01	11/19/19 17:32	1
Phenol-d5	53		30 - 153	11/16/19 18:01	11/19/19 17:32	1
Terphenyl-d14	104		42 - 157	11/16/19 18:01	11/19/19 17:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J	1.2	0.23	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Arsenic	9.4		0.59	0.20	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Barium	84		0.59	0.067	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Beryllium	0.80		0.23	0.055	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Boron	13		2.9	0.27	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Cadmium	0.13	B	0.12	0.021	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Calcium	47000	B	120	20	mg/Kg	☼	11/15/19 08:30	11/18/19 09:59	10
Chromium	19		0.59	0.29	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Cobalt	13		0.29	0.077	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Copper	24		0.59	0.16	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Iron	24000	B	12	6.1	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Lead	16		0.29	0.14	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Manganese	480		0.59	0.085	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Nickel	35		0.59	0.17	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Potassium	3200		29	10	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Selenium	0.56	J	0.59	0.34	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Silver	3.4		0.29	0.075	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Sodium	340		59	8.7	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Thallium	1.1		0.59	0.29	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Vanadium	27		0.29	0.069	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	1
Zinc	74		1.2	0.51	mg/Kg	☼	11/15/19 08:30	11/16/19 03:06	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		11/14/19 15:55	11/15/19 22:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 22:00	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 22:00	1
Iron	0.23	J	0.40	0.20	mg/L		11/14/19 15:55	11/15/19 22:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B02

Lab Sample ID: 500-172993-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 22:00	1
Manganese	0.32		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 22:00	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 22:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.070		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 15:29	1
Barium	0.63		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 15:29	1
Beryllium	0.0073		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 15:29	1
Boron	0.18		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 15:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 15:29	1
Calcium	30		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:29	1
Chromium	0.16		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:29	1
Cobalt	0.049		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:29	1
Iron	180		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 15:29	1
Lead	0.081		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 15:29	1
Manganese	1.1		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:29	1
Nickel	0.21 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:29	1
Potassium	30		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:29	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 15:29	1
Silver	0.015 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:29	1
Zinc	0.51		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 15:29	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		11/14/19 15:55	11/19/19 04:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:46	1
Thallium	0.0041		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00023		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0064	mg/Kg	☼	11/08/19 12:05	11/11/19 09:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.27	mg/Kg	☼	11/19/19 13:10	11/19/19 16:15	1
pH	8.1		0.2	0.2	SU			11/08/19 17:08	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B04

Lab Sample ID: 500-172993-4

Date Collected: 11/05/19 14:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Chloroethane	<0.0038 *		0.0038	0.0011	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Methylene Chloride	0.0026 J		0.0038	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 04:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	11/06/19 19:45	11/16/19 04:22	1
4-Bromofluorobenzene (Surr)	94		75 - 131	11/06/19 19:45	11/16/19 04:22	1
Dibromofluoromethane	91		75 - 126	11/06/19 19:45	11/16/19 04:22	1
Toluene-d8 (Surr)	96		75 - 124	11/06/19 19:45	11/16/19 04:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B04

Lab Sample ID: 500-172993-4

Date Collected: 11/05/19 14:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Acenaphthylene	0.021	J	0.036	0.0047	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Anthracene	0.015	J	0.036	0.0060	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Benzo[a]anthracene	0.061		0.036	0.0048	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Benzo[a]pyrene	0.27		0.036	0.0069	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Benzo[b]fluoranthene	0.26		0.036	0.0077	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Benzo[g,h,i]perylene	0.17		0.036	0.012	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Benzo[k]fluoranthene	0.20		0.036	0.011	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Chrysene	0.11		0.036	0.0098	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Fluoranthene	0.082		0.036	0.0066	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B04

Lab Sample ID: 500-172993-4

Date Collected: 11/05/19 14:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.21		0.036	0.0093	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Naphthalene	0.0084	J	0.036	0.0055	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Phenanthrene	0.035	J	0.036	0.0050	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Pyrene	0.21		0.036	0.0071	mg/Kg	☼	11/16/19 18:01	11/20/19 15:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		31 - 143				11/16/19 18:01	11/20/19 15:10	1
2-Fluorobiphenyl	77		43 - 145				11/16/19 18:01	11/20/19 15:10	1
2-Fluorophenol	64		31 - 166				11/16/19 18:01	11/20/19 15:10	1
Nitrobenzene-d5	63		37 - 147				11/16/19 18:01	11/20/19 15:10	1
Phenol-d5	69		30 - 153				11/16/19 18:01	11/20/19 15:10	1
Terphenyl-d14	145		42 - 157				11/16/19 18:01	11/20/19 15:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.42	J	1.0	0.20	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Arsenic	5.7		0.51	0.18	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Barium	29		0.51	0.058	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Beryllium	0.28		0.20	0.048	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Boron	9.0		2.6	0.24	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Cadmium	0.19	B	0.10	0.018	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Calcium	140000	B	100	17	mg/Kg	☼	11/15/19 08:30	11/18/19 10:03	10
Chromium	13		0.51	0.25	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Cobalt	4.0		0.26	0.067	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Copper	8.6		0.51	0.14	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Iron	8300	B	10	5.3	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Lead	31		0.26	0.12	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Magnesium	81000		51	25	mg/Kg	☼	11/15/19 08:30	11/18/19 10:03	10
Manganese	330		0.51	0.074	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Nickel	12		0.51	0.15	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Potassium	920		26	9.1	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Selenium	0.33	J	0.51	0.30	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Silver	1.1		0.26	0.066	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Sodium	160		51	7.6	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Thallium	<0.51		0.51	0.26	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Vanadium	16		0.26	0.060	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	1
Zinc	31		1.0	0.45	mg/Kg	☼	11/15/19 08:30	11/16/19 03:14	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		11/08/19 15:37	11/12/19 15:37	1
Barium	<0.50		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 15:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 15:37	1
Boron	<0.10		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 15:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B04

Lab Sample ID: 500-172993-4

Date Collected: 11/05/19 14:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 92.4

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		11/08/19 15:37	11/12/19 15:37	1
Calcium	7.4		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:37	1
Chromium	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:37	1
Cobalt	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:37	1
Iron	4.0		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 15:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 15:37	1
Manganese	0.032		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:37	1
Nickel	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:37	1
Potassium	1.3 J		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:37	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 15:37	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:37	1
Zinc	0.023 J		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 15:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:54	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		11/12/19 09:20	11/13/19 09:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011 J		0.017	0.0057	mg/Kg	☼	11/08/19 12:05	11/11/19 09:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.44		0.44	0.22	mg/Kg	☼	11/19/19 13:10	11/19/19 16:16	1
pH	7.7		0.2	0.2	SU			11/08/19 17:15	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B05

Lab Sample ID: 500-172993-5

Date Collected: 11/05/19 14:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 76.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Chloroethane	<0.0049 *		0.0049	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Methylene Chloride	0.0027	J	0.0049	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1
Xylenes, Total	0.00071	J	0.0040	0.00063	mg/Kg	☼	11/06/19 19:45	11/16/19 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/06/19 19:45	11/16/19 04:47	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/06/19 19:45	11/16/19 04:47	1
Dibromofluoromethane	97		75 - 126	11/06/19 19:45	11/16/19 04:47	1
Toluene-d8 (Surr)	95		75 - 124	11/06/19 19:45	11/16/19 04:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.22		0.22	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
1,2-Dichlorobenzene	<0.22		0.22	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
1,3-Dichlorobenzene	<0.22		0.22	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
1,4-Dichlorobenzene	<0.22		0.22	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B05

Lab Sample ID: 500-172993-5

Date Collected: 11/05/19 14:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 76.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.43		0.43	0.098	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2,4-Dinitrophenol	<0.87		0.87	0.76	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2,4-Dinitrotoluene	<0.22		0.22	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2,6-Dinitrotoluene	<0.22		0.22	0.085	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2-Chlorophenol	<0.22		0.22	0.073	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2-Methylnaphthalene	<0.087		0.087	0.0079	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
3 & 4 Methylphenol	<0.22		0.22	0.072	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.060	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
4,6-Dinitro-2-methylphenol	<0.87		0.87	0.35	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
4-Chloroaniline	<0.87		0.87	0.20	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
4-Nitrophenol	<0.87		0.87	0.41	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Acenaphthene	<0.043		0.043	0.0077	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Acenaphthylene	<0.043		0.043	0.0057	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Anthracene	<0.043		0.043	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Benzo[a]anthracene	<0.043		0.043	0.0058	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Benzo[a]pyrene	<0.043		0.043	0.0083	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Benzo[b]fluoranthene	<0.043		0.043	0.0093	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.079	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Chrysene	<0.043		0.043	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0083	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Dibenzofuran	<0.22		0.22	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Dimethyl phthalate	<0.22		0.22	0.056	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Di-n-octyl phthalate	<0.22		0.22	0.070	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Fluoranthene	<0.043		0.043	0.0080	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Fluorene	<0.043		0.043	0.0061	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Hexachlorobenzene	<0.087		0.087	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Hexachlorocyclopentadiene	<0.87		0.87	0.25	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Hexachloroethane	<0.22		0.22	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B05

Lab Sample ID: 500-172993-5

Date Collected: 11/05/19 14:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 76.8

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	<0.043		0.043	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Isophorone	<0.22		0.22	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Naphthalene	<0.043		0.043	0.0066	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
N-Nitrosodi-n-propylamine	<0.087		0.087	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Pentachlorophenol	<0.87		0.87	0.69	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Phenanthrene	<0.043		0.043	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Phenol	<0.22		0.22	0.096	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1
Pyrene	<0.043		0.043	0.0086	mg/Kg	☼	11/16/19 18:01	11/19/19 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		31 - 143	11/16/19 18:01	11/19/19 13:56	1
2-Fluorobiphenyl	73		43 - 145	11/16/19 18:01	11/19/19 13:56	1
2-Fluorophenol	59		31 - 166	11/16/19 18:01	11/19/19 13:56	1
Nitrobenzene-d5	62		37 - 147	11/16/19 18:01	11/19/19 13:56	1
Phenol-d5	54		30 - 153	11/16/19 18:01	11/19/19 13:56	1
Terphenyl-d14	102		42 - 157	11/16/19 18:01	11/19/19 13:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41	J	1.2	0.23	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Arsenic	4.6		0.60	0.21	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Barium	110		0.60	0.069	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Beryllium	0.64		0.24	0.056	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Boron	3.3		3.0	0.28	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Cadmium	0.036	J B	0.12	0.022	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Calcium	2100	B	12	2.0	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Chromium	17		0.60	0.30	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Cobalt	3.7		0.30	0.079	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Copper	13		0.60	0.17	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Iron	18000	B	12	6.3	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Lead	12		0.30	0.14	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Magnesium	2800		6.0	3.0	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Manganese	140		0.60	0.088	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Nickel	15		0.60	0.18	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Potassium	1600		30	11	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Selenium	0.72		0.60	0.35	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Silver	4.4		0.30	0.078	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Sodium	330		60	8.9	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Thallium	1.5		0.60	0.30	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Vanadium	26		0.30	0.071	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	1
Zinc	67		1.2	0.53	mg/Kg	☼	11/15/19 08:30	11/16/19 03:18	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		11/14/19 15:55	11/15/19 22:22	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 22:22	1
Iron	0.26	J F1	0.40	0.20	mg/L		11/14/19 15:55	11/15/19 22:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 22:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

Client Sample ID: 3222V-7-B05

Lab Sample ID: 500-172993-5

Date Collected: 11/05/19 14:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 76.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.36		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 22:22	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 22:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.028	J	0.050	0.010	mg/L		11/13/19 15:30	11/14/19 21:00	1
Barium	1.4		0.50	0.050	mg/L		11/13/19 15:30	11/14/19 21:00	1
Beryllium	0.0078		0.0040	0.0040	mg/L		11/13/19 15:30	11/14/19 21:00	1
Boron	0.095	J	0.10	0.050	mg/L		11/13/19 15:30	11/14/19 21:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/13/19 15:30	11/14/19 21:00	1
Calcium	23		2.5	0.50	mg/L		11/13/19 15:30	11/14/19 21:00	1
Chromium	0.19		0.025	0.010	mg/L		11/13/19 15:30	11/14/19 21:00	1
Cobalt	0.022	J	0.025	0.010	mg/L		11/13/19 15:30	11/14/19 21:00	1
Iron	180		0.40	0.20	mg/L		11/13/19 15:30	11/14/19 21:00	1
Lead	0.074		0.0075	0.0075	mg/L		11/13/19 15:30	11/14/19 21:00	1
Manganese	0.50		0.025	0.010	mg/L		11/13/19 15:30	11/14/19 21:00	1
Nickel	0.14		0.025	0.010	mg/L		11/13/19 15:30	11/14/19 21:00	1
Potassium	24		2.5	0.50	mg/L		11/13/19 15:30	11/14/19 21:00	1
Selenium	<0.050		0.050	0.020	mg/L		11/13/19 15:30	11/14/19 21:00	1
Silver	0.025		0.025	0.010	mg/L		11/13/19 15:30	11/14/19 21:00	1
Zinc	0.77		0.50	0.020	mg/L		11/13/19 15:30	11/14/19 21:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:55	11/19/19 04:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:58	1
Thallium	0.0031		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:58	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		11/12/19 09:20	11/13/19 09:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.020	0.0066	mg/Kg	☼	11/08/19 12:05	11/11/19 09:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	11/19/19 13:10	11/19/19 16:16	1
pH	7.2		0.2	0.2	SU			11/08/19 17:19	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172993-1

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 - AE7-029

Job ID: 500-172993-1

Laboratory: Eurofins TestAmerica, Chicago


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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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 500-172993 COC Contact: Colleen Grey email: cgrey@andrews-eng.com		Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>AE7-27A</u> Project No.: <u>PTB/WLO: 184-006/27A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD Other Sampler: <u>William Ulewicz / R. Mann</u>	COC No.: <u>L of L</u> Lab Job No.: <u>500-172993</u> Sample Temp: <u>56.2, 9.2, 4</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES																				
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				
1	3822V-7-BC1	11-5-19	1210	S	X	X					X	X	X	X	X					
2	3822V-7-BC2	↓	1240																	
3	3822V-7-BC3		1330																	
4	3822V-7-BC4		1420																	
5	3822V-7-BC5		1430																	
	3822V-7-BC6-1																			
	3822V-7-BC6-2																			
	3822V-7-BC6-3																			
	3822V-7-BC7																			
	3822V-7-BC8																			
	3822V-7-BC8-DP																			

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

																				Comments

Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/5/19 5:00pm</u>	Received by: <u>Aneesh Bala Krishnan</u>	Date/Time: <u>11/5/19 5:00pm</u>
Relinquished by: <u>Aneesh Bala Krishnan</u>	Date/Time: <u>11/6/19 9:05am</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 2905</u>
Relinquished by: <u>P. Neal</u>	Date/Time: <u>11/6/19 1100</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 1100</u>



ANALYTICAL REPORT

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

Laboratory Job ID: 500-173121-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/22/2019 4:04:25 PM

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

LINKS

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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 - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-1

Lab Sample ID: 500-173121-1

Date Collected: 11/06/19 10:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Chloroethane	<0.0045 *		0.0045	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Methylene Chloride	0.0022	J	0.0045	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1
Xylenes, Total	0.00080	J	0.0036	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 14:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/07/19 18:30	11/16/19 14:49	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/07/19 18:30	11/16/19 14:49	1
Dibromofluoromethane	94		75 - 126	11/07/19 18:30	11/16/19 14:49	1
Toluene-d8 (Surr)	96		75 - 124	11/07/19 18:30	11/16/19 14:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-1

Lab Sample ID: 500-173121-1

Date Collected: 11/06/19 10:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Acenaphthylene	0.014	J	0.038	0.0051	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Anthracene	0.013	J	0.038	0.0065	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Benzo[a]anthracene	0.068		0.038	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Benzo[a]pyrene	0.065		0.038	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Benzo[b]fluoranthene	0.075		0.038	0.0084	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Benzo[g,h,i]perylene	0.054		0.038	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Benzo[k]fluoranthene	0.048		0.038	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Chrysene	0.082		0.038	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Fluoranthene	0.14		0.038	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-1

Lab Sample ID: 500-173121-1

Date Collected: 11/06/19 10:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.1

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	0.043		0.038	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Phenanthrene	0.040		0.038	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Pyrene	0.18		0.038	0.0077	mg/Kg	☼	11/18/19 16:53	11/21/19 12:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		31 - 143				11/18/19 16:53	11/21/19 12:50	1
2-Fluorobiphenyl	80		43 - 145				11/18/19 16:53	11/21/19 12:50	1
2-Fluorophenol	70		31 - 166				11/18/19 16:53	11/21/19 12:50	1
Nitrobenzene-d5	66		37 - 147				11/18/19 16:53	11/21/19 12:50	1
Phenol-d5	69		30 - 153				11/18/19 16:53	11/21/19 12:50	1
Terphenyl-d14	92		42 - 157				11/18/19 16:53	11/21/19 12:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J	1.1	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Arsenic	8.3		0.56	0.19	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Barium	42		0.56	0.064	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Beryllium	0.60		0.22	0.052	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Boron	9.6		2.8	0.26	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Cadmium	0.17	B	0.11	0.020	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Calcium	65000	B	110	19	mg/Kg	☼	11/19/19 17:37	11/21/19 11:04	10
Chromium	15	B	0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Cobalt	11		0.28	0.073	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Copper	22		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Iron	20000	B	11	5.8	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Lead	16		0.28	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Magnesium	28000		5.6	2.8	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Manganese	450		0.56	0.081	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Nickel	30		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Potassium	2100		28	9.9	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Silver	2.6		0.28	0.072	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Sodium	1300		56	8.3	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Thallium	0.79		0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Vanadium	20		0.28	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	1
Zinc	75		1.1	0.49	mg/Kg	☼	11/19/19 17:37	11/20/19 17:54	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		11/15/19 15:20	11/19/19 01:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 01:32	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:32	1
Iron	<0.40	*	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 01:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-1

Lab Sample ID: 500-173121-1

Date Collected: 11/06/19 10:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.1

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		11/15/19 15:20	11/19/19 01:32	1
Manganese	1.2		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:32	1
Nickel	0.024	J B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.15		0.050	0.010	mg/L		11/15/19 15:21	11/18/19 23:50	1
Barium	0.77		0.50	0.050	mg/L		11/15/19 15:21	11/18/19 23:50	1
Beryllium	0.0091		0.0040	0.0040	mg/L		11/15/19 15:21	11/18/19 23:50	1
Boron	0.20		0.10	0.050	mg/L		11/15/19 15:21	11/18/19 23:50	1
Cadmium	0.0033	J	0.0050	0.0020	mg/L		11/15/19 15:21	11/18/19 23:50	1
Calcium	50		2.5	0.50	mg/L		11/15/19 15:21	11/18/19 23:50	1
Chromium	0.22		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:50	1
Cobalt	0.13		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:50	1
Iron	340		0.40	0.20	mg/L		11/15/19 15:21	11/18/19 23:50	1
Lead	0.29		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 12:34	1
Manganese	2.5		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:50	1
Nickel	0.38		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:50	1
Potassium	39		2.5	0.50	mg/L		11/15/19 15:21	11/18/19 23:50	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/18/19 23:50	1
Silver	0.026		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:50	1
Zinc	1.0		0.50	0.020	mg/L		11/15/19 15:21	11/18/19 23:50	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		11/15/19 15:20	11/20/19 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 13:41	1
Thallium	0.0064		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 13:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00038		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 09:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.017	0.0058	mg/Kg	☼	11/15/19 14:20	11/18/19 08:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.29	mg/Kg	☼	11/20/19 10:45	11/20/19 15:34	1
pH	8.6		0.2	0.2	SU			11/13/19 14:23	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-2

Lab Sample ID: 500-173121-2

Date Collected: 11/06/19 10:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
2-Butanone (MEK)	0.0027	J	0.0040	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Acetone	0.026		0.016	0.0070	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Methylene Chloride	0.0020	J	0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1
Xylenes, Total	0.00071	J	0.0032	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	11/07/19 18:30	11/16/19 15:15	1
4-Bromofluorobenzene (Surr)	94		75 - 131	11/07/19 18:30	11/16/19 15:15	1
Dibromofluoromethane	98		75 - 126	11/07/19 18:30	11/16/19 15:15	1
Toluene-d8 (Surr)	93		75 - 124	11/07/19 18:30	11/16/19 15:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-2

Lab Sample ID: 500-173121-2

Date Collected: 11/06/19 10:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Acenaphthylene	0.0066	J	0.039	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Benzo[a]anthracene	0.017	J	0.039	0.0053	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Benzo[a]pyrene	0.021	J	0.039	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Benzo[b]fluoranthene	0.028	J	0.039	0.0085	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Benzo[g,h,i]perylene	0.021	J	0.039	0.013	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Benzo[k]fluoranthene	0.016	J	0.039	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Chrysene	0.021	J	0.039	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Fluoranthene	0.031	J	0.039	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-2

Lab Sample ID: 500-173121-2

Date Collected: 11/06/19 10:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.016	J	0.039	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Phenanthrene	0.013	J	0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Pyrene	0.030	J	0.039	0.0078	mg/Kg	☼	11/18/19 16:53	11/21/19 13:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		31 - 143				11/18/19 16:53	11/21/19 13:15	1
2-Fluorobiphenyl	89		43 - 145				11/18/19 16:53	11/21/19 13:15	1
2-Fluorophenol	74		31 - 166				11/18/19 16:53	11/21/19 13:15	1
Nitrobenzene-d5	74		37 - 147				11/18/19 16:53	11/21/19 13:15	1
Phenol-d5	72		30 - 153				11/18/19 16:53	11/21/19 13:15	1
Terphenyl-d14	97		42 - 157				11/18/19 16:53	11/21/19 13:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	J	1.1	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Arsenic	7.3		0.57	0.20	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Barium	42		0.57	0.065	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Beryllium	0.61		0.23	0.053	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Boron	9.2		2.9	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Cadmium	0.19	B	0.11	0.021	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Calcium	68000	B	110	19	mg/Kg	☼	11/19/19 17:37	11/21/19 11:08	10
Chromium	14	B	0.57	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Cobalt	11		0.29	0.075	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Copper	20		0.57	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Iron	19000	B	11	5.9	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Lead	20		0.29	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Magnesium	31000		5.7	2.8	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Manganese	430		0.57	0.083	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Nickel	29		0.57	0.17	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Potassium	2000		29	10	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Selenium	0.39	J B	0.57	0.34	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Silver	2.6		0.29	0.074	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Sodium	1300		57	8.5	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Thallium	0.79		0.57	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Vanadium	19		0.29	0.067	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	1
Zinc	70		1.1	0.50	mg/Kg	☼	11/19/19 17:37	11/20/19 18:06	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		11/15/19 15:20	11/19/19 01:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 01:37	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:37	1
Iron	<0.40	*	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 01:37	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-2

Lab Sample ID: 500-173121-2

Date Collected: 11/06/19 10:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.1

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		11/15/19 15:20	11/19/19 01:37	1
Manganese	8.5		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:37	1
Nickel	0.031	B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.11		0.050	0.010	mg/L		11/15/19 15:21	11/18/19 23:54	1
Barium	0.52		0.50	0.050	mg/L		11/15/19 15:21	11/18/19 23:54	1
Beryllium	0.0072		0.0040	0.0040	mg/L		11/15/19 15:21	11/18/19 23:54	1
Boron	0.19		0.10	0.050	mg/L		11/15/19 15:21	11/18/19 23:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/18/19 23:54	1
Calcium	29		2.5	0.50	mg/L		11/15/19 15:21	11/18/19 23:54	1
Chromium	0.18		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:54	1
Cobalt	0.10		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:54	1
Iron	250		0.40	0.20	mg/L		11/15/19 15:21	11/18/19 23:54	1
Lead	0.13		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 12:38	1
Manganese	2.4		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:54	1
Nickel	0.28		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:54	1
Potassium	34		2.5	0.50	mg/L		11/15/19 15:21	11/18/19 23:54	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/18/19 23:54	1
Silver	0.015	J	0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:54	1
Zinc	0.73		0.50	0.020	mg/L		11/15/19 15:21	11/18/19 23:54	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		11/15/19 15:20	11/20/19 17:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 13:44	1
Thallium	0.0044		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 13:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00041		0.00033	0.00033	mg/L		11/18/19 10:10	11/19/19 09:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0066	mg/Kg	☼	11/15/19 14:20	11/18/19 08:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.28	mg/Kg	☼	11/20/19 10:45	11/20/19 15:34	1
pH	8.4		0.2	0.2	SU			11/13/19 14:24	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-3

Lab Sample ID: 500-173121-3

Date Collected: 11/06/19 10:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Acetone	0.026		0.016	0.0068	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/07/19 18:30	11/16/19 15:40	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/07/19 18:30	11/16/19 15:40	1
Dibromofluoromethane	95		75 - 126	11/07/19 18:30	11/16/19 15:40	1
Toluene-d8 (Surr)	95		75 - 124	11/07/19 18:30	11/16/19 15:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-3

Lab Sample ID: 500-173121-3

Date Collected: 11/06/19 10:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[a]anthracene	0.0087	J	0.038	0.0051	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-3

Lab Sample ID: 500-173121-3

Date Collected: 11/06/19 10:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		31 - 143				11/18/19 16:53	11/21/19 13:39	1
2-Fluorobiphenyl	89		43 - 145				11/18/19 16:53	11/21/19 13:39	1
2-Fluorophenol	76		31 - 166				11/18/19 16:53	11/21/19 13:39	1
Nitrobenzene-d5	78		37 - 147				11/18/19 16:53	11/21/19 13:39	1
Phenol-d5	73		30 - 153				11/18/19 16:53	11/21/19 13:39	1
Terphenyl-d14	96		42 - 157				11/18/19 16:53	11/21/19 13:39	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.1	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Arsenic	7.8		0.56	0.19	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Barium	37		0.56	0.064	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Beryllium	0.60		0.22	0.053	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Boron	9.8		2.8	0.26	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Cadmium	0.16	B	0.11	0.020	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Calcium	73000	B	110	19	mg/Kg	☼	11/19/19 17:37	11/21/19 11:12	10
Chromium	15	B	0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Cobalt	11		0.28	0.074	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Copper	21		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Iron	19000	B	11	5.8	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Lead	12		0.28	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Magnesium	31000		5.6	2.8	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Manganese	390		0.56	0.082	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Nickel	28		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Potassium	2300		28	9.9	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Silver	2.5		0.28	0.073	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Sodium	830		56	8.3	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Thallium	0.82		0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Vanadium	19		0.28	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	1
Zinc	64		1.1	0.49	mg/Kg	☼	11/19/19 17:37	11/20/19 18:10	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		11/15/19 15:20	11/19/19 01:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 01:41	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:41	1
Iron	<0.40	*	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 01:41	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B06-3

Lab Sample ID: 500-173121-3

Date Collected: 11/06/19 10:30

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.1

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		11/15/19 15:20	11/19/19 01:41	1
Manganese	2.7		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:41	1
Nickel	0.031	B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.12		0.050	0.010	mg/L		11/15/19 15:21	11/18/19 23:58	1
Barium	0.66		0.50	0.050	mg/L		11/15/19 15:21	11/18/19 23:58	1
Beryllium	0.0076		0.0040	0.0040	mg/L		11/15/19 15:21	11/18/19 23:58	1
Boron	0.22		0.10	0.050	mg/L		11/15/19 15:21	11/18/19 23:58	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		11/15/19 15:21	11/18/19 23:58	1
Calcium	62		2.5	0.50	mg/L		11/15/19 15:21	11/18/19 23:58	1
Chromium	0.21		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:58	1
Cobalt	0.094		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:58	1
Iron	280		0.40	0.20	mg/L		11/15/19 15:21	11/18/19 23:58	1
Lead	0.13		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 12:42	1
Manganese	2.0		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:58	1
Nickel	0.32		0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:58	1
Potassium	44		2.5	0.50	mg/L		11/15/19 15:21	11/18/19 23:58	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/18/19 23:58	1
Silver	0.022	J	0.025	0.010	mg/L		11/15/19 15:21	11/18/19 23:58	1
Zinc	0.89		0.50	0.020	mg/L		11/15/19 15:21	11/18/19 23:58	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		11/15/19 15:20	11/20/19 18:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 13:47	1
Thallium	0.0048		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 13:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00055		0.00050	0.00050	mg/L		11/18/19 10:10	11/19/19 09:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.018	0.0061	mg/Kg	☼	11/15/19 14:20	11/18/19 08:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	11/20/19 10:45	11/20/19 15:35	1
pH	8.5		0.2	0.2	SU			11/13/19 14:26	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B07

Lab Sample ID: 500-173121-4

Date Collected: 11/06/19 10:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/07/19 18:30	11/16/19 16:05	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/07/19 18:30	11/16/19 16:05	1
Dibromofluoromethane	92		75 - 126	11/07/19 18:30	11/16/19 16:05	1
Toluene-d8 (Surr)	99		75 - 124	11/07/19 18:30	11/16/19 16:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B07

Lab Sample ID: 500-173121-4

Date Collected: 11/06/19 10:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Acenaphthylene	0.0058	J	0.037	0.0050	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Benzo[a]anthracene	0.027	J	0.037	0.0051	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Benzo[a]pyrene	0.035	J	0.037	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Benzo[b]fluoranthene	0.047		0.037	0.0081	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Benzo[g,h,i]perylene	0.030	J	0.037	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Benzo[k]fluoranthene	0.020	J	0.037	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Chrysene	0.035	J	0.037	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Fluoranthene	0.056		0.037	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B07

Lab Sample ID: 500-173121-4

Date Collected: 11/06/19 10:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.026	J	0.037	0.0098	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Phenanthrene	0.020	J	0.037	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Pyrene	0.056		0.037	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 14:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		31 - 143				11/18/19 16:53	11/21/19 14:03	1
2-Fluorobiphenyl	76		43 - 145				11/18/19 16:53	11/21/19 14:03	1
2-Fluorophenol	67		31 - 166				11/18/19 16:53	11/21/19 14:03	1
Nitrobenzene-d5	65		37 - 147				11/18/19 16:53	11/21/19 14:03	1
Phenol-d5	64		30 - 153				11/18/19 16:53	11/21/19 14:03	1
Terphenyl-d14	90		42 - 157				11/18/19 16:53	11/21/19 14:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.1	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Arsenic	6.6		0.56	0.19	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Barium	69		0.56	0.063	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Beryllium	0.58		0.22	0.052	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Boron	5.5		2.8	0.26	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Cadmium	0.26	B	0.11	0.020	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Calcium	29000	B	11	1.9	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Chromium	14	B	0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Cobalt	10		0.28	0.073	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Copper	18		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Iron	16000	B	11	5.8	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Lead	36		0.28	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Magnesium	18000		5.6	2.8	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Manganese	470		0.56	0.081	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Nickel	22		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Potassium	1400		28	9.8	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Selenium	0.51	J B	0.56	0.33	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Silver	2.9		0.28	0.072	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Sodium	500		56	8.2	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Thallium	0.63		0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Vanadium	20		0.28	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	1
Zinc	93		1.1	0.49	mg/Kg	☼	11/19/19 17:37	11/20/19 18:14	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		11/15/19 15:20	11/19/19 01:45	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:45	1
Iron	0.35	J *	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 01:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:20	11/19/19 01:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B07

Lab Sample ID: 500-173121-4

Date Collected: 11/06/19 10:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.12		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:45	1
Nickel	0.017	J B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:45	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		11/15/19 15:21	11/19/19 00:02	1
Barium	0.57		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:02	1
Boron	0.12		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:02	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:02	1
Calcium	23		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:02	1
Chromium	0.13		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:02	1
Cobalt	0.040		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:02	1
Iron	160		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:02	1
Lead	0.12		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 12:46	1
Manganese	1.1		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:02	1
Nickel	0.15		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:02	1
Potassium	19		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:02	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:02	1
Silver	0.012	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:02	1
Zinc	0.59		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/15/19 15:20	11/20/19 18:03	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		11/15/19 15:21	11/20/19 13:59	1
Thallium	0.0041		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00030		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.018	0.0061	mg/Kg	☼	11/15/19 14:20	11/18/19 09:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.44		0.44	0.22	mg/Kg	☼	11/20/19 10:45	11/20/19 15:35	1
pH	7.8		0.2	0.2	SU			11/13/19 14:26	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08

Lab Sample ID: 500-173121-5

Date Collected: 11/06/19 10:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Chloroethane	<0.0042 *		0.0042	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Methylene Chloride	0.0020	J	0.0042	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1
Xylenes, Total	0.00057	J	0.0034	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/07/19 18:30	11/16/19 16:30	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/07/19 18:30	11/16/19 16:30	1
Dibromofluoromethane	94		75 - 126	11/07/19 18:30	11/16/19 16:30	1
Toluene-d8 (Surr)	98		75 - 124	11/07/19 18:30	11/16/19 16:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08

Lab Sample ID: 500-173121-5

Date Collected: 11/06/19 10:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Acenaphthylene	0.0091	J	0.037	0.0049	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Anthracene	0.0096	J	0.037	0.0062	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Benzo[a]anthracene	0.051		0.037	0.0050	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Benzo[a]pyrene	0.073		0.037	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Benzo[b]fluoranthene	0.11		0.037	0.0080	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Benzo[g,h,i]perylene	0.041		0.037	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Benzo[k]fluoranthene	0.056		0.037	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Chrysene	0.071		0.037	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Fluoranthene	0.10		0.037	0.0069	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08

Lab Sample ID: 500-173121-5

Date Collected: 11/06/19 10:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.0

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	0.034	J	0.037	0.0096	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Phenanthrene	0.031	J	0.037	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Pyrene	0.10		0.037	0.0074	mg/Kg	☼	11/18/19 16:53	11/21/19 14:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		31 - 143				11/18/19 16:53	11/21/19 14:51	1
2-Fluorobiphenyl	79		43 - 145				11/18/19 16:53	11/21/19 14:51	1
2-Fluorophenol	64		31 - 166				11/18/19 16:53	11/21/19 14:51	1
Nitrobenzene-d5	65		37 - 147				11/18/19 16:53	11/21/19 14:51	1
Phenol-d5	63		30 - 153				11/18/19 16:53	11/21/19 14:51	1
Terphenyl-d14	91		42 - 157				11/18/19 16:53	11/21/19 14:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.1	0.21	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Arsenic	7.0		0.53	0.18	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Barium	43		0.53	0.061	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Beryllium	0.57		0.21	0.050	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Boron	9.4		2.7	0.25	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Cadmium	0.16	B	0.11	0.019	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Calcium	74000	B	110	18	mg/Kg	☼	11/19/19 17:37	11/21/19 11:16	10
Chromium	13	B	0.53	0.26	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Cobalt	10		0.27	0.070	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Copper	18		0.53	0.15	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Iron	17000	B	11	5.6	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Lead	28		0.27	0.12	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Magnesium	43000		53	26	mg/Kg	☼	11/19/19 17:37	11/21/19 11:16	10
Manganese	370		0.53	0.077	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Nickel	24		0.53	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Potassium	1800		27	9.5	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Silver	2.3		0.27	0.069	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Sodium	450		53	7.9	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Thallium	0.54		0.53	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Vanadium	19		0.27	0.063	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1
Zinc	70		1.1	0.47	mg/Kg	☼	11/19/19 17:37	11/20/19 18:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/15/19 15:20	11/19/19 01:49	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:49	1
Iron	<0.40	*	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 01:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:20	11/19/19 01:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08

Lab Sample ID: 500-173121-5

Date Collected: 11/06/19 10:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.33		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:49	1
Nickel	0.015	J B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.068		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:06	1
Barium	0.42	J	0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:06	1
Beryllium	0.0040		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:06	1
Boron	0.16		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:06	1
Calcium	26		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:06	1
Chromium	0.13		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:06	1
Cobalt	0.042		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:06	1
Iron	150		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:06	1
Lead	0.096		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 12:50	1
Manganese	0.69		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:06	1
Nickel	0.15		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:06	1
Potassium	25		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:06	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:06	1
Silver	<0.025		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:06	1
Zinc	0.45	J	0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:06	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		11/15/19 15:20	11/20/19 18:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 14:02	1
Thallium	0.0031		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00028		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.019	0.0063	mg/Kg	☼	11/15/19 14:20	11/18/19 09:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.21	mg/Kg	☼	11/20/19 10:45	11/20/19 15:37	1
pH	8.1		0.2	0.2	SU			11/13/19 14:27	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08 Dup

Lab Sample ID: 500-173121-6

Date Collected: 11/06/19 10:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Chloroethane	<0.0044 *		0.0044	0.0013	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Methylene Chloride	0.0022	J	0.0044	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1
Xylenes, Total	0.00059	J	0.0035	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	11/07/19 18:30	11/16/19 16:56	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/07/19 18:30	11/16/19 16:56	1
Dibromofluoromethane	96		75 - 126	11/07/19 18:30	11/16/19 16:56	1
Toluene-d8 (Surr)	98		75 - 124	11/07/19 18:30	11/16/19 16:56	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	☼	11/18/19 16:53	11/21/19 14:27	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08 Dup

Lab Sample ID: 500-173121-6

Date Collected: 11/06/19 10:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
4-Chloroaniline	<0.79		0.79	0.19	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08 Dup

Lab Sample ID: 500-173121-6

Date Collected: 11/06/19 10:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/18/19 16:53	11/21/19 14:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		31 - 143				11/18/19 16:53	11/21/19 14:27	1
2-Fluorobiphenyl	73		43 - 145				11/18/19 16:53	11/21/19 14:27	1
2-Fluorophenol	64		31 - 166				11/18/19 16:53	11/21/19 14:27	1
Nitrobenzene-d5	62		37 - 147				11/18/19 16:53	11/21/19 14:27	1
Phenol-d5	68		30 - 153				11/18/19 16:53	11/21/19 14:27	1
Terphenyl-d14	86		42 - 157				11/18/19 16:53	11/21/19 14:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.2	0.23	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Arsenic	9.9		0.58	0.20	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Barium	67		0.58	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Beryllium	0.68		0.23	0.054	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Boron	8.9		2.9	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Calcium	56000	B	120	20	mg/Kg	☼	11/19/19 17:37	11/21/19 11:20	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Cobalt	13		0.29	0.076	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Copper	23		0.58	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Iron	22000	B	12	6.1	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Lead	17		0.29	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Magnesium	27000		5.8	2.9	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Manganese	480		0.58	0.084	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Nickel	33		0.58	0.17	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Potassium	2100		29	10	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Silver	3.0		0.29	0.075	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Sodium	660		58	8.6	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Vanadium	23		0.29	0.069	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	1
Zinc	78		1.2	0.51	mg/Kg	☼	11/19/19 17:37	11/20/19 18:22	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		11/15/19 15:20	11/19/19 01:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 01:53	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:53	1
Iron	<0.40	*	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 01:53	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B08 Dup

Lab Sample ID: 500-173121-6

Date Collected: 11/06/19 10:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:20	11/19/19 01:53	1
Manganese	1.8		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:53	1
Nickel	0.026	B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 01:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.094		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:10	1
Barium	0.67		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:10	1
Beryllium	0.0057		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:10	1
Boron	0.15		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:10	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:10	1
Calcium	25		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:10	1
Chromium	0.15		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:10	1
Cobalt	0.057		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:10	1
Iron	210		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:10	1
Lead	0.092		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 12:54	1
Manganese	1.1		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:10	1
Nickel	0.23		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:10	1
Potassium	25		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:10	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:10	1
Silver	0.015	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:10	1
Zinc	0.68		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:10	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		11/15/19 15:20	11/20/19 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 14:04	1
Thallium	0.0065		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00040		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.019	0.0064	mg/Kg	☼	11/15/19 14:20	11/18/19 09:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.29	mg/Kg	☼	11/20/19 10:45	11/20/19 15:37	1
pH	7.7		0.2	0.2	SU			11/13/19 14:28	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B10

Lab Sample ID: 500-173121-11

Date Collected: 11/06/19 09:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Chloroethane	<0.0037 *		0.0037	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Methylene Chloride	0.0015 J		0.0037	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1
Xylenes, Total	0.00074 J		0.0030	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/07/19 18:30	11/16/19 17:46	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/07/19 18:30	11/16/19 17:46	1
Dibromofluoromethane	96		75 - 126	11/07/19 18:30	11/16/19 17:46	1
Toluene-d8 (Surr)	95		75 - 124	11/07/19 18:30	11/16/19 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
1,3-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B10

Lab Sample ID: 500-173121-11

Date Collected: 11/06/19 09:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Anthracene	<0.037		0.037	0.0061	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Benzo[a]anthracene	0.020	J	0.037	0.0050	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Benzo[a]pyrene	0.028	J	0.037	0.0071	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Benzo[b]fluoranthene	0.035	J	0.037	0.0079	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Benzo[g,h,i]perylene	0.014	J	0.037	0.012	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Benzo[k]fluoranthene	0.023	J	0.037	0.011	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Chrysene	0.031	J	0.037	0.010	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Fluoranthene	0.040		0.037	0.0068	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B10

Lab Sample ID: 500-173121-11

Date Collected: 11/06/19 09:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.7

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	0.014	J	0.037	0.0095	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
N-Nitrosodiphenylamine	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Phenanthrene	0.016	J	0.037	0.0051	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Pyrene	0.044		0.037	0.0073	mg/Kg	☼	11/18/19 16:53	11/22/19 11:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		31 - 143				11/18/19 16:53	11/22/19 11:21	1
2-Fluorobiphenyl	76		43 - 145				11/18/19 16:53	11/22/19 11:21	1
2-Fluorophenol	67		31 - 166				11/18/19 16:53	11/22/19 11:21	1
Nitrobenzene-d5	63		37 - 147				11/18/19 16:53	11/22/19 11:21	1
Phenol-d5	67		30 - 153				11/18/19 16:53	11/22/19 11:21	1
Terphenyl-d14	96		42 - 157				11/18/19 16:53	11/22/19 11:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.47	J	1.1	0.21	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Arsenic	8.4		0.53	0.18	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Barium	50		0.53	0.061	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Beryllium	0.65		0.21	0.050	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Boron	10		2.7	0.25	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Cadmium	0.16	B	0.11	0.019	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Calcium	59000	B	110	18	mg/Kg	☼	11/19/19 17:37	11/21/19 11:24	10
Chromium	15	B	0.53	0.26	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Cobalt	11		0.27	0.070	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Copper	22		0.53	0.15	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Iron	19000	B	11	5.5	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Lead	25		0.27	0.12	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Magnesium	27000		5.3	2.6	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Manganese	420		0.53	0.077	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Nickel	29		0.53	0.15	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Potassium	2300		27	9.4	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Silver	2.6		0.27	0.069	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Sodium	570		53	7.9	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Thallium	0.86		0.53	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Vanadium	22		0.27	0.063	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	1
Zinc	70		1.1	0.47	mg/Kg	☼	11/19/19 17:37	11/20/19 18:30	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		11/15/19 15:20	11/19/19 02:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 02:10	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:10	1
Iron	0.26	J *	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 02:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B10

Lab Sample ID: 500-173121-11

Date Collected: 11/06/19 09:45

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.7

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		11/15/19 15:20	11/19/19 02:10	1
Manganese	1.2		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:10	1
Nickel	0.021	J B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.096		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:18	1
Barium	0.64		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:18	1
Beryllium	0.0067		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:18	1
Boron	0.21		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:18	1
Calcium	42		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:18	1
Chromium	0.17		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:18	1
Cobalt	0.072		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:18	1
Iron	210		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:18	1
Lead	0.26		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 13:01	1
Manganese	1.1		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:18	1
Nickel	0.25		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:18	1
Potassium	34		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:18	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:18	1
Silver	0.016	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:18	1
Zinc	0.72		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/15/19 15:20	11/20/19 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/15/19 15:21	11/20/19 14:10	1
Thallium	0.0048		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00030		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.018	0.0061	mg/Kg	☼	11/15/19 14:20	11/18/19 09:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	11/20/19 10:45	11/20/19 15:38	1
pH	8.2		0.2	0.2	SU			11/13/19 14:30	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B11

Lab Sample ID: 500-173121-12

Date Collected: 11/06/19 09:35

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Chloroethane	<0.0036 *		0.0036	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Methylene Chloride	0.0019	J	0.0036	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1
Xylenes, Total	0.00048	J	0.0029	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/07/19 18:30	11/16/19 18:11	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/07/19 18:30	11/16/19 18:11	1
Dibromofluoromethane	96		75 - 126	11/07/19 18:30	11/16/19 18:11	1
Toluene-d8 (Surr)	96		75 - 124	11/07/19 18:30	11/16/19 18:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B11

Lab Sample ID: 500-173121-12

Date Collected: 11/06/19 09:35

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Anthracene	0.0086	J	0.037	0.0062	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Benzo[a]anthracene	0.046		0.037	0.0050	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Benzo[a]pyrene	0.058		0.037	0.0072	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Benzo[b]fluoranthene	0.097		0.037	0.0080	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Benzo[g,h,i]perylene	0.033	J	0.037	0.012	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Benzo[k]fluoranthene	0.032	J	0.037	0.011	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Chrysene	0.065		0.037	0.010	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Fluoranthene	0.094		0.037	0.0069	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B11

Lab Sample ID: 500-173121-12

Date Collected: 11/06/19 09:35

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.030	J	0.037	0.0096	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Phenanthrene	0.034	J	0.037	0.0052	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Pyrene	0.11		0.037	0.0074	mg/Kg	☼	11/18/19 16:53	11/22/19 12:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		31 - 143				11/18/19 16:53	11/22/19 12:09	1
2-Fluorobiphenyl	69		43 - 145				11/18/19 16:53	11/22/19 12:09	1
2-Fluorophenol	60		31 - 166				11/18/19 16:53	11/22/19 12:09	1
Nitrobenzene-d5	55		37 - 147				11/18/19 16:53	11/22/19 12:09	1
Phenol-d5	61		30 - 153				11/18/19 16:53	11/22/19 12:09	1
Terphenyl-d14	97		42 - 157				11/18/19 16:53	11/22/19 12:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Arsenic	7.1		0.56	0.19	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Barium	47		0.56	0.064	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Beryllium	0.56		0.23	0.053	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Boron	8.7		2.8	0.26	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Cadmium	0.14	B	0.11	0.020	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Calcium	65000	B	110	19	mg/Kg	☼	11/19/19 17:37	11/21/19 11:36	10
Chromium	14	B	0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Cobalt	11		0.28	0.074	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Copper	19		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Iron	18000	B	11	5.9	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Lead	23		0.28	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Magnesium	28000		5.6	2.8	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Manganese	380		0.56	0.082	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Nickel	25		0.56	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Potassium	1900		28	10	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Silver	2.4		0.28	0.073	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Sodium	680		56	8.3	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Thallium	0.73		0.56	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Vanadium	23		0.28	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	1
Zinc	59		1.1	0.49	mg/Kg	☼	11/19/19 17:37	11/20/19 18:34	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		11/15/19 15:20	11/19/19 02:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:20	11/19/19 02:14	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:14	1
Iron	<0.40	*	0.40	0.20	mg/L		11/15/19 15:20	11/19/19 02:14	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

Client Sample ID: 322V-7-B11

Lab Sample ID: 500-173121-12

Date Collected: 11/06/19 09:35

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 88.0

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		11/15/19 15:20	11/19/19 02:14	1
Manganese	5.0		0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:14	1
Nickel	0.034	B	0.025	0.010	mg/L		11/15/19 15:20	11/19/19 02:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.078		0.050	0.010	mg/L		11/15/19 15:21	11/19/19 00:30	1
Barium	0.59		0.50	0.050	mg/L		11/15/19 15:21	11/19/19 00:30	1
Beryllium	0.0051		0.0040	0.0040	mg/L		11/15/19 15:21	11/19/19 00:30	1
Boron	0.14		0.10	0.050	mg/L		11/15/19 15:21	11/19/19 00:30	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/15/19 15:21	11/19/19 00:30	1
Calcium	29		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:30	1
Chromium	0.14		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:30	1
Cobalt	0.066		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:30	1
Iron	180		0.40	0.20	mg/L		11/15/19 15:21	11/19/19 00:30	1
Lead	0.18		0.0075	0.0075	mg/L		11/15/19 15:21	11/19/19 13:13	1
Manganese	1.4		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:30	1
Nickel	0.20		0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:30	1
Potassium	22		2.5	0.50	mg/L		11/15/19 15:21	11/19/19 00:30	1
Selenium	<0.050		0.050	0.020	mg/L		11/15/19 15:21	11/19/19 00:30	1
Silver	0.015	J	0.025	0.010	mg/L		11/15/19 15:21	11/19/19 00:30	1
Zinc	0.53		0.50	0.020	mg/L		11/15/19 15:21	11/19/19 00:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/15/19 15:20	11/20/19 18:18	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		11/15/19 15:21	11/20/19 14:13	1
Thallium	0.0037		0.0020	0.0020	mg/L		11/15/19 15:21	11/20/19 14:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00033		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 10:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.018	0.0059	mg/Kg	☼	11/15/19 14:20	11/18/19 09:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	11/20/19 10:45	11/20/19 15:38	1
pH	8.1		0.2	0.2	SU			11/13/19 14:31	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173121-1

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.
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

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

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
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 - AE7-029

Job ID: 500-173121-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name: <u>AC-7-29A</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: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>PT18/1110:184-006/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other	Lab Job No.: <u>500-173121</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 MAC, run ASTM D3987 (Neutral Leach) cyanide.		Sampler: <u>KEVIN MOORE / W. Wlewicz</u>	

Special Instructions:					ANALYSES											Matrix Key:		
					VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids		Waste Characterization	
Lab ID	Sample ID	Sample Date	Sample Time	Matrix												Comments		
10	3222V-7-1309	11-6-19	0955	S	X	X						X	X	X	X	X		
11	3222V-7-1310	11-6-19	0945	↓	↓	↓						↓	↓	↓	↓	↓		
12	3222V-7-1311	11-6-19	0935	↓	↓	↓						↓	↓	↓	↓	↓		

Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/6/19 6:00pm</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 6:00pm</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/7/19 0910</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/7/19 0910</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/7/19 1105</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/7/19 1105</u>



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

100-109 Jodi Lane, 100-375 Cheviot Drive, and 30W277- 30W311 West Bartlett Road

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99441 Longitude: - 88.20981
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 355

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 3222V-9-B01 AND 3222V-9-B02 WERE SAMPLED ADJACENT TO SITE 3222V-9. SEE TABLE 3d 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBER: 500-172890-1.

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:

Jan 12, 2022

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

ISGS Site 3222V-9

Residences

Sample ID	3222V-9-B01	3222V-9-B02	Maximum Allowable Concentration				
Sample Depth (ft)	0-3	0-3					
Sample Date	11/4/2019	11/4/2019					
PID	0	0	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area
Sample pH	7.3	8.4					
Matrix	Soil	Soil					
No Contaminants of Concern Noted.							

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172890-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/19/2019 3:30:55 PM

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

LINKS

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results through
TotalAccess

Have a Question?



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www.testamericainc.com

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B01

Lab Sample ID: 500-172890-1

Date Collected: 11/04/19 14:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/05/19 16:30	11/15/19 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/15/19 01:28	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/05/19 16:30	11/15/19 01:28	1
Dibromofluoromethane	95		75 - 126	11/05/19 16:30	11/15/19 01:28	1
Toluene-d8 (Surr)	96		75 - 124	11/05/19 16:30	11/15/19 01:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B01

Lab Sample ID: 500-172890-1

Date Collected: 11/04/19 14:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2,4-Dinitrophenol	<0.72	* F1	0.72	0.63	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2-Methylnaphthalene	<0.072	F1	0.072	0.0066	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Benzo[a]anthracene	0.036		0.036	0.0048	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Benzo[a]pyrene	0.047		0.036	0.0069	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Benzo[b]fluoranthene	0.053		0.036	0.0077	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Benzo[k]fluoranthene	0.031	J F1	0.036	0.011	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Chrysene	0.041		0.036	0.0098	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Di-n-octyl phthalate	<0.18	F1	0.18	0.058	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Fluoranthene	0.065		0.036	0.0066	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Hexachlorocyclopentadiene	<0.72	F1	0.72	0.21	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B01

Lab Sample ID: 500-172890-1

Date Collected: 11/04/19 14:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.026	J	0.036	0.0093	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Phenanthrene	0.023	J	0.036	0.0050	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Pyrene	0.073		0.036	0.0071	mg/Kg	☼	11/14/19 16:29	11/15/19 19:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		31 - 143				11/14/19 16:29	11/15/19 19:16	1
2-Fluorobiphenyl	91		43 - 145				11/14/19 16:29	11/15/19 19:16	1
2-Fluorophenol	72		31 - 166				11/14/19 16:29	11/15/19 19:16	1
Nitrobenzene-d5	71		37 - 147				11/14/19 16:29	11/15/19 19:16	1
Phenol-d5	76		30 - 153				11/14/19 16:29	11/15/19 19:16	1
Terphenyl-d14	117		42 - 157				11/14/19 16:29	11/15/19 19:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J F1	1.0	0.20	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Arsenic	7.2	F1	0.52	0.18	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Barium	24		0.52	0.059	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Beryllium	0.25		0.21	0.049	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Boron	6.9		2.6	0.24	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Cadmium	0.14	B	0.10	0.019	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Calcium	120000	B	100	18	mg/Kg	☼	11/13/19 18:00	11/14/19 21:03	10
Chromium	6.4	F1	0.52	0.26	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Cobalt	5.3		0.26	0.068	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Copper	12		0.52	0.15	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Iron	13000		10	5.4	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Lead	9.1	F1	0.26	0.12	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Magnesium	66000		52	26	mg/Kg	☼	11/13/19 18:00	11/14/19 21:03	10
Manganese	320		0.52	0.076	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Nickel	12		0.52	0.15	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Potassium	900	F1	26	9.2	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Silver	1.4		0.26	0.067	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Sodium	450		52	7.7	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Vanadium	13	F1	0.26	0.061	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1
Zinc	34		1.0	0.46	mg/Kg	☼	11/13/19 18:00	11/14/19 13:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:39	1
Manganese	2.4		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B01

Lab Sample ID: 500-172890-1

Date Collected: 11/04/19 14:00

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 91.9

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		11/08/19 15:02	11/12/19 13:32	1
Barium	0.20	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:32	1
Boron	0.080	J	0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:32	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:32	1
Calcium	16		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:32	1
Chromium	0.048		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:32	1
Cobalt	0.015	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:32	1
Iron	54		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:32	1
Lead	0.028		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:32	1
Manganese	0.47		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:32	1
Nickel	0.052		0.025	0.010	mg/L		11/08/19 15:02	11/13/19 20:13	1
Potassium	11		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:32	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:32	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:32	1
Zinc	0.16	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 18:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 18:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.017	0.0057	mg/Kg	☼	11/11/19 14:40	11/12/19 07:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.38		0.38	0.19	mg/Kg	☼	11/15/19 14:10	11/15/19 18:48	1
pH	8.4		0.2	0.2	SU			11/07/19 16:04	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B02

Lab Sample ID: 500-172890-2

Date Collected: 11/04/19 13:50

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Chloroethane	<0.0041 *		0.0041	0.0012	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	11/05/19 16:30	11/15/19 01:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/05/19 16:30	11/15/19 01:53	1
4-Bromofluorobenzene (Surr)	89		75 - 131	11/05/19 16:30	11/15/19 01:53	1
Dibromofluoromethane	98		75 - 126	11/05/19 16:30	11/15/19 01:53	1
Toluene-d8 (Surr)	93		75 - 124	11/05/19 16:30	11/15/19 01:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B02

Lab Sample ID: 500-172890-2

Date Collected: 11/04/19 13:50

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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	0.089	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Dibenzofuran	<0.20		0.20	0.045	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B02

Lab Sample ID: 500-172890-2

Date Collected: 11/04/19 13:50

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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	☼	11/14/19 16:29	11/15/19 13:40	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/14/19 16:29	11/15/19 13:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		31 - 143				11/14/19 16:29	11/15/19 13:40	1
2-Fluorobiphenyl	85		43 - 145				11/14/19 16:29	11/15/19 13:40	1
2-Fluorophenol	75		31 - 166				11/14/19 16:29	11/15/19 13:40	1
Nitrobenzene-d5	72		37 - 147				11/14/19 16:29	11/15/19 13:40	1
Phenol-d5	80		30 - 153				11/14/19 16:29	11/15/19 13:40	1
Terphenyl-d14	116		42 - 157				11/14/19 16:29	11/15/19 13:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.1	0.22	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Arsenic	7.9		0.57	0.19	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Barium	65		0.57	0.065	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Beryllium	0.73		0.23	0.053	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Boron	11		2.8	0.27	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Cadmium	0.16	B	0.11	0.021	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Calcium	69000	B	110	19	mg/Kg	☼	11/13/19 18:00	11/14/19 21:20	10
Chromium	16		0.57	0.28	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Cobalt	12		0.28	0.075	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Copper	22		0.57	0.16	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Iron	21000		11	5.9	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Lead	14		0.28	0.13	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Magnesium	34000	^	5.7	2.8	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Manganese	430		0.57	0.083	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Nickel	31		0.57	0.17	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Potassium	2500		28	10	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Selenium	0.39	J	0.57	0.34	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Silver	3.1		0.28	0.074	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Sodium	170		57	8.4	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Thallium	0.95		0.57	0.28	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Vanadium	22		0.28	0.067	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	1
Zinc	65		1.1	0.50	mg/Kg	☼	11/13/19 18:00	11/14/19 13:51	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		11/14/19 15:53	11/15/19 14:43	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:43	1
Manganese	0.14		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Client Sample ID: 3222V-9-B02

Lab Sample ID: 500-172890-2

Date Collected: 11/04/19 13:50

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.037	J	0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:36	1
Barium	0.40	J F1	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:36	1
Beryllium	0.0047		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:36	1
Boron	0.16		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:36	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:36	1
Calcium	24	F1	2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:36	1
Chromium	0.10		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:36	1
Cobalt	0.029		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:36	1
Iron	98		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:36	1
Lead	0.039		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:36	1
Manganese	0.44		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:36	1
Nickel	0.11	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:36	1
Potassium	25	F1	2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:36	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:36	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:36	1
Zinc	0.26	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:36	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		11/14/19 15:53	11/15/19 15:57	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		11/08/19 15:02	11/12/19 18:29	1
Thallium	0.0028		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 18:29	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		11/12/19 09:20	11/13/19 11:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0062	mg/Kg	☼	11/11/19 14:40	11/12/19 07:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	11/15/19 14:10	11/15/19 18:49	1
pH	7.8		0.2	0.2	SU			11/07/19 16:08	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172890-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

1101-1105 West Bartlett Road

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99438 Longitude: -88.20743
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 1,351

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 3222V-10-B01, -B02, -B03, -B04, -B05, -B06, -B07 AND -B09 WERE SAMPLED ADJACENT TO SITE 3222V-10. SEE TABLE 3e AND FIGURES 2 AND 4 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-172888-1, 500-172990-1, AND 500-173112-1.

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:

Jan 12, 2022

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

ISGS Site 3222V-10
Victory Center of Bartlett

Sample ID	3222V-10-B01	3222V-10-B02	3222V-10-B03	3222V-10-B04	3222V-10-B05	Maximum Allowable Concentration				
Sample Depth (ft)	0-4	0-4	0-4	0-4	0-5	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area
Sample Date	11/4/2019	11/4/2019	11/4/2019	11/4/2019	11/5/2019					
PID	0	0	0	0	0					
Sample pH	7.2	7.9	7.5	7.3	7.2					
Matrix	Soil	Soil	Soil	Soil	Soil					
Inorganic Compounds, Total (mg/kg)										
Arsenic	7.4	7.5	7.3	5.6	9.3	11.3	--	11.3	--	13

Sample ID	3222V-10-B05 DUP	3222V-10-B06	3222V-10-B07	3222V-10-B09	Maximum Allowable Concentration					
Sample Depth (ft)	0-5	0-5	0-5	0-5	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area	
Sample Date	11/5/2019	11/6/2019	11/6/2019	11/6/2019						
PID	0	0	0	0						
Sample pH	7.6	7.6	8.3	7.6						
Matrix	Soil	Soil	Soil	Soil						
Inorganic Compounds, Total (mg/kg)										
Arsenic	13	1,3	7	6.9	8.3	11.3	--	11.3	--	13

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172888-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/19/2019 4:42:59 PM

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B01

Lab Sample ID: 500-172888-1

Date Collected: 11/04/19 13:45

Matrix: Solid

Date Received: 11/05/19 10:45

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	<0.0018		0.0018	0.00061	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
2-Butanone (MEK)	0.0049		0.0045	0.0020	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Acetone	0.024		0.018	0.0079	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Chloroethane	<0.0045 *		0.0045	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1
Xylenes, Total	0.00073 J		0.0036	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 12:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/11/19 12:14	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/05/19 16:30	11/11/19 12:14	1
Dibromofluoromethane	95		75 - 126	11/05/19 16:30	11/11/19 12:14	1
Toluene-d8 (Surr)	95		75 - 124	11/05/19 16:30	11/11/19 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B01

Lab Sample ID: 500-172888-1

Date Collected: 11/04/19 13:45

Matrix: Solid

Date Received: 11/05/19 10:45

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	0.096	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2-Methylnaphthalene	<0.085	*	0.085	0.0078	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Acenaphthylene	0.021	J	0.042	0.0056	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Anthracene	0.011	J	0.042	0.0071	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Benzo[a]anthracene	0.069		0.042	0.0057	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Benzo[a]pyrene	0.089		0.042	0.0082	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Benzo[b]fluoranthene	0.13		0.042	0.0091	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Benzo[g,h,i]perylene	0.065		0.042	0.014	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Benzo[k]fluoranthene	0.064		0.042	0.012	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Chrysene	0.082		0.042	0.012	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Dibenz(a,h)anthracene	0.015	J	0.042	0.0082	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Fluoranthene	0.13		0.042	0.0078	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B01

Lab Sample ID: 500-172888-1

Date Collected: 11/04/19 13:45

Matrix: Solid

Date Received: 11/05/19 10:45

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	0.061		0.042	0.011	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Phenanthrene	0.040	J	0.042	0.0059	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Pyrene	0.14		0.042	0.0084	mg/Kg	☼	11/15/19 07:25	11/16/19 20:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>2,4,6-Tribromophenol</i>	101		31 - 143				11/15/19 07:25	11/16/19 20:58	1
<i>2-Fluorobiphenyl</i>	94		43 - 145				11/15/19 07:25	11/16/19 20:58	1
<i>2-Fluorophenol</i>	76		31 - 166				11/15/19 07:25	11/16/19 20:58	1
<i>Nitrobenzene-d5</i>	81		37 - 147				11/15/19 07:25	11/16/19 20:58	1
<i>Phenol-d5</i>	72		30 - 153				11/15/19 07:25	11/16/19 20:58	1
<i>Terphenyl-d14</i>	117		42 - 157				11/15/19 07:25	11/16/19 20:58	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.2	0.24	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Arsenic	7.4		0.62	0.21	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Barium	120		0.62	0.071	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Beryllium	0.66		0.25	0.058	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Boron	4.3		3.1	0.29	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Cadmium	0.40	B	0.12	0.022	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Calcium	4400	B	12	2.1	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Chromium	15		0.62	0.31	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Cobalt	13		0.31	0.081	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Copper	18		0.62	0.17	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Iron	18000		12	6.4	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Lead	24		0.31	0.14	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Magnesium	3500	B	6.2	3.1	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Manganese	960		0.62	0.090	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Nickel	23		0.62	0.18	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Potassium	1500		31	11	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Selenium	<0.62		0.62	0.36	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Silver	3.6		0.31	0.080	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Sodium	310		62	9.2	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Thallium	0.65		0.62	0.31	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Vanadium	22		0.31	0.073	mg/Kg	☼	11/14/19 17:39	11/15/19 19:50	1
Zinc	84		1.2	0.54	mg/Kg	☼	11/14/19 17:39	11/18/19 11:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.29	J	0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:22	1
Manganese	0.048		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B01

Lab Sample ID: 500-172888-1

Date Collected: 11/04/19 13:45

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 78.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.012	J	0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:16	1
Barium	0.27	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:16	1
Boron	0.064	J	0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:16	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:16	1
Calcium	7.6		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:16	1
Chromium	0.044		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:16	1
Cobalt	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:16	1
Iron	37		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:16	1
Lead	0.023		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:16	1
Manganese	0.58		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:16	1
Nickel	0.039		0.025	0.010	mg/L		11/08/19 15:02	11/13/19 19:53	1
Potassium	8.6		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:16	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:16	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:16	1
Zinc	0.15	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 18:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 18:03	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		11/11/19 10:30	11/12/19 08:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.019	0.0065	mg/Kg	☼	11/07/19 14:15	11/08/19 08:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.48	J	0.59	0.29	mg/Kg	☼	11/15/19 14:10	11/15/19 18:46	1
pH	7.2		0.2	0.2	SU			11/07/19 15:48	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B02

Lab Sample ID: 500-172888-2

Date Collected: 11/04/19 13:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Chloroethane	<0.0046 *		0.0046	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1
Xylenes, Total	0.00072	J	0.0036	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 12:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/05/19 16:30	11/11/19 12:40	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/05/19 16:30	11/11/19 12:40	1
Dibromofluoromethane	94		75 - 126	11/05/19 16:30	11/11/19 12:40	1
Toluene-d8 (Surr)	96		75 - 124	11/05/19 16:30	11/11/19 12:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B02

Lab Sample ID: 500-172888-2

Date Collected: 11/04/19 13:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2-Methylnaphthalene	<0.079	*	0.079	0.0072	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Benzo[a]anthracene	0.016	J	0.039	0.0053	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Benzo[a]pyrene	0.024	J	0.039	0.0076	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Benzo[b]fluoranthene	0.041		0.039	0.0084	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Benzo[g,h,i]perylene	0.019	J	0.039	0.013	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Chrysene	0.022	J	0.039	0.011	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Fluoranthene	0.032	J	0.039	0.0073	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B02

Lab Sample ID: 500-172888-2

Date Collected: 11/04/19 13:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.9

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	0.017	J	0.039	0.010	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Phenanthrene	0.0092	J	0.039	0.0055	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Pyrene	0.030	J	0.039	0.0078	mg/Kg	☼	11/15/19 07:25	11/16/19 14:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>2,4,6-Tribromophenol</i>	97		31 - 143				11/15/19 07:25	11/16/19 14:22	1
<i>2-Fluorobiphenyl</i>	98		43 - 145				11/15/19 07:25	11/16/19 14:22	1
<i>2-Fluorophenol</i>	84		31 - 166				11/15/19 07:25	11/16/19 14:22	1
<i>Nitrobenzene-d5</i>	87		37 - 147				11/15/19 07:25	11/16/19 14:22	1
<i>Phenol-d5</i>	88		30 - 153				11/15/19 07:25	11/16/19 14:22	1
<i>Terphenyl-d14</i>	110		42 - 157				11/15/19 07:25	11/16/19 14:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.1	0.22	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Arsenic	7.5		0.57	0.20	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Barium	89		0.57	0.065	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Beryllium	0.73		0.23	0.054	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Boron	5.7		2.9	0.27	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Cadmium	0.23	B	0.11	0.021	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Calcium	15000	B	11	1.9	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Chromium	15		0.57	0.28	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Cobalt	13		0.29	0.075	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Copper	18		0.57	0.16	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Iron	20000		11	6.0	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Lead	19		0.29	0.13	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Magnesium	11000	B	5.7	2.8	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Manganese	640		0.57	0.083	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Nickel	25		0.57	0.17	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Potassium	1700		29	10	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Silver	3.4		0.29	0.074	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Sodium	130		57	8.5	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Thallium	0.86		0.57	0.29	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Vanadium	25		0.29	0.068	mg/Kg	☼	11/14/19 17:39	11/15/19 19:53	1
Zinc	70		1.1	0.50	mg/Kg	☼	11/14/19 17:39	11/18/19 12:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:26	1
Manganese	0.013	J	0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B02

Lab Sample ID: 500-172888-2

Date Collected: 11/04/19 13:35

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.035	J	0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:20	1
Barium	0.37	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:20	1
Boron	0.13		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:20	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:20	1
Calcium	22		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:20	1
Chromium	0.087		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:20	1
Cobalt	0.024	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:20	1
Iron	90		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:20	1
Lead	0.041		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:20	1
Manganese	0.49		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:20	1
Nickel	0.095		0.025	0.010	mg/L		11/08/19 15:02	11/13/19 19:57	1
Potassium	22		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:20	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:20	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:20	1
Zinc	0.26	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 18:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 18:06	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		11/11/19 10:30	11/12/19 08:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.019	0.0062	mg/Kg	☼	11/07/19 14:15	11/08/19 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.44		0.44	0.22	mg/Kg	☼	11/15/19 14:10	11/15/19 18:47	1
pH	7.9		0.2	0.2	SU			11/07/19 15:51	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B03

Lab Sample ID: 500-172888-3

Date Collected: 11/04/19 13:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
2-Butanone (MEK)	0.0027	J	0.0042	0.0019	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Acetone	0.026		0.017	0.0074	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Chloroethane	<0.0042	*	0.0042	0.0013	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Methylene Chloride	0.0017	J	0.0042	0.0017	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/05/19 16:30	11/11/19 13:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/05/19 16:30	11/11/19 13:06	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/05/19 16:30	11/11/19 13:06	1
Dibromofluoromethane	96		75 - 126	11/05/19 16:30	11/11/19 13:06	1
Toluene-d8 (Surr)	95		75 - 124	11/05/19 16:30	11/11/19 13:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B03

Lab Sample ID: 500-172888-3

Date Collected: 11/04/19 13:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2-Methylnaphthalene	<0.081	*	0.081	0.0074	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Hexachlorobenzene	<0.081		0.081	0.0094	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B03

Lab Sample ID: 500-172888-3

Date Collected: 11/04/19 13:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/15/19 07:25	11/16/19 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	76		31 - 143				11/15/19 07:25	11/16/19 14:47	1
2-Fluorobiphenyl	90		43 - 145				11/15/19 07:25	11/16/19 14:47	1
2-Fluorophenol	79		31 - 166				11/15/19 07:25	11/16/19 14:47	1
Nitrobenzene-d5	78		37 - 147				11/15/19 07:25	11/16/19 14:47	1
Phenol-d5	80		30 - 153				11/15/19 07:25	11/16/19 14:47	1
Terphenyl-d14	103		42 - 157				11/15/19 07:25	11/16/19 14:47	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	☼	11/14/19 17:39	11/15/19 19:57	1
Arsenic	7.3		0.59	0.20	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Barium	95		0.59	0.067	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Beryllium	0.67		0.23	0.055	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Boron	6.2		2.9	0.27	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Cadmium	0.096	J B	0.12	0.021	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Calcium	3900	B	12	2.0	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Chromium	17		0.59	0.29	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Cobalt	13		0.29	0.077	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Copper	22		0.59	0.16	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Iron	20000		12	6.1	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Lead	15		0.29	0.14	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Magnesium	5300	B	5.9	2.9	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Manganese	300		0.59	0.085	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Nickel	40		0.59	0.17	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Potassium	1800		29	10	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Silver	4.2		0.29	0.076	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Sodium	400		59	8.7	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Thallium	1.0		0.59	0.29	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Vanadium	21		0.29	0.069	mg/Kg	☼	11/14/19 17:39	11/15/19 19:57	1
Zinc	75		1.2	0.51	mg/Kg	☼	11/14/19 17:39	11/18/19 12:14	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		11/14/19 15:53	11/15/19 14:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:53	11/15/19 14:30	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:30	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B03

Lab Sample ID: 500-172888-3

Date Collected: 11/04/19 13:30

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 82.0

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		11/14/19 15:53	11/15/19 14:30	1
Manganese	20		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:30	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.061		0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:24	1
Barium	0.59		0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:24	1
Beryllium	0.0063		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:24	1
Boron	0.12		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:24	1
Calcium	9.8		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:24	1
Chromium	0.17		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:24	1
Cobalt	0.056		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:24	1
Iron	170		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:24	1
Lead	0.056		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:24	1
Manganese	1.9		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:24	1
Nickel	0.19	^	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:24	1
Potassium	26		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:24	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:24	1
Silver	0.011	J	0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:24	1
Zinc	0.47	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:53	11/15/19 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 18:10	1
Thallium	0.0024		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00036		0.00020	0.00020	mg/L		11/11/19 10:30	11/12/19 08:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.020	0.0066	mg/Kg	☼	11/07/19 14:15	11/08/19 08:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.40		0.40	0.20	mg/Kg	☼	11/15/19 14:10	11/15/19 18:47	1
pH	7.5		0.2	0.2	SU			11/07/19 15:58	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B04

Lab Sample ID: 500-172888-4

Date Collected: 11/04/19 13:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Acetone	0.010	J	0.016	0.0069	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/05/19 16:30	11/11/19 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/05/19 16:30	11/11/19 13:31	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/05/19 16:30	11/11/19 13:31	1
Dibromofluoromethane	95		75 - 126	11/05/19 16:30	11/11/19 13:31	1
Toluene-d8 (Surr)	95		75 - 124	11/05/19 16:30	11/11/19 13:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B04

Lab Sample ID: 500-172888-4

Date Collected: 11/04/19 13:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2-Methylnaphthalene	<0.079	*	0.079	0.0072	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B04

Lab Sample ID: 500-172888-4

Date Collected: 11/04/19 13:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/15/19 07:25	11/16/19 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		31 - 143				11/15/19 07:25	11/16/19 15:11	1
2-Fluorobiphenyl	89		43 - 145				11/15/19 07:25	11/16/19 15:11	1
2-Fluorophenol	78		31 - 166				11/15/19 07:25	11/16/19 15:11	1
Nitrobenzene-d5	77		37 - 147				11/15/19 07:25	11/16/19 15:11	1
Phenol-d5	79		30 - 153				11/15/19 07:25	11/16/19 15:11	1
Terphenyl-d14	103		42 - 157				11/15/19 07:25	11/16/19 15:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41	J	1.1	0.22	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Arsenic	5.6		0.56	0.19	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Barium	70		0.56	0.064	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Beryllium	0.60		0.22	0.052	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Boron	6.5		2.8	0.26	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Cadmium	0.16	B	0.11	0.020	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Calcium	31000	B	11	1.9	mg/Kg	☼	11/14/19 17:39	11/18/19 12:19	1
Chromium	13		0.56	0.28	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Cobalt	9.8		0.28	0.073	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Copper	17		0.56	0.16	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Iron	16000		11	5.8	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Lead	13		0.28	0.13	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Magnesium	21000	B	5.6	2.8	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Manganese	390		0.56	0.081	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Nickel	21		0.56	0.16	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Potassium	1800		28	9.9	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Silver	3.1		0.28	0.072	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Sodium	190		56	8.3	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Thallium	0.75		0.56	0.28	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Vanadium	21		0.28	0.066	mg/Kg	☼	11/14/19 17:39	11/15/19 20:01	1
Zinc	57		1.1	0.49	mg/Kg	☼	11/14/19 17:39	11/18/19 12:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:53	11/15/19 14:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:53	11/15/19 14:34	1
Manganese	5.0		0.025	0.010	mg/L		11/14/19 15:53	11/15/19 14:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

Client Sample ID: 3222V-10-B04

Lab Sample ID: 500-172888-4

Date Collected: 11/04/19 13:20

Matrix: Solid

Date Received: 11/05/19 10:45

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.029	J	0.050	0.010	mg/L		11/08/19 15:02	11/12/19 13:28	1
Barium	0.30	J	0.50	0.050	mg/L		11/08/19 15:02	11/12/19 13:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:02	11/12/19 13:28	1
Boron	0.12		0.10	0.050	mg/L		11/08/19 15:02	11/12/19 13:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:02	11/12/19 13:28	1
Calcium	21		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:28	1
Chromium	0.065		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:28	1
Cobalt	0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:28	1
Iron	67		0.40	0.20	mg/L		11/08/19 15:02	11/12/19 13:28	1
Lead	0.034		0.0075	0.0075	mg/L		11/08/19 15:02	11/12/19 13:28	1
Manganese	0.69		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:28	1
Nickel	0.080		0.025	0.010	mg/L		11/08/19 15:02	11/13/19 20:01	1
Potassium	18		2.5	0.50	mg/L		11/08/19 15:02	11/12/19 13:28	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:02	11/12/19 13:28	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:02	11/12/19 13:28	1
Zinc	0.20	J	0.50	0.020	mg/L		11/08/19 15:02	11/12/19 13:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:02	11/12/19 18:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:02	11/12/19 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00021		0.00020	0.00020	mg/L		11/11/19 10:30	11/12/19 08:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0062	mg/Kg	☼	11/07/19 14:15	11/08/19 08:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	11/15/19 14:10	11/15/19 18:48	1
pH	7.3		0.2	0.2	SU			11/07/19 16:01	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172888-1

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.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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 - AE7-029

Job ID: 500-172888-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172990-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/20/2019 4:44:47 PM

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

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05

Lab Sample ID: 500-172990-1

Date Collected: 11/05/19 10:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 74.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Chloroethane	<0.0047 *		0.0047	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	11/06/19 19:45	11/16/19 01:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/06/19 19:45	11/16/19 01:26	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/06/19 19:45	11/16/19 01:26	1
Dibromofluoromethane	97		75 - 126	11/06/19 19:45	11/16/19 01:26	1
Toluene-d8 (Surr)	94		75 - 124	11/06/19 19:45	11/16/19 01:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.22		0.22	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
1,4-Dichlorobenzene	<0.22		0.22	0.056	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05

Lab Sample ID: 500-172990-1

Date Collected: 11/05/19 10:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 74.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.43		0.43	0.099	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2,4-Dimethylphenol	<0.43		0.43	0.17	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2,4-Dinitrophenol	<0.88	*	0.88	0.77	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2,4-Dinitrotoluene	<0.22		0.22	0.069	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2,6-Dinitrotoluene	<0.22		0.22	0.086	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2-Chlorophenol	<0.22		0.22	0.074	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2-Methylnaphthalene	<0.088		0.088	0.0080	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2-Methylphenol	<0.22		0.22	0.070	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2-Nitroaniline	<0.22		0.22	0.059	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
3 & 4 Methylphenol	<0.22		0.22	0.073	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.061	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
3-Nitroaniline	<0.43		0.43	0.14	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
4,6-Dinitro-2-methylphenol	<0.88		0.88	0.35	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
4-Chloroaniline	<0.88		0.88	0.20	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
4-Nitrophenol	<0.88		0.88	0.41	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Acenaphthene	<0.043		0.043	0.0078	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Acenaphthylene	<0.043		0.043	0.0057	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Anthracene	<0.043		0.043	0.0073	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Benzo[a]anthracene	<0.043		0.043	0.0059	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Benzo[a]pyrene	0.0093	J	0.043	0.0084	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Benzo[b]fluoranthene	0.012	J	0.043	0.0094	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.065	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.080	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Butyl benzyl phthalate	<0.22		0.22	0.083	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Chrysene	<0.043		0.043	0.012	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0084	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Diethyl phthalate	<0.22		0.22	0.074	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Dimethyl phthalate	<0.22		0.22	0.057	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Di-n-octyl phthalate	<0.22		0.22	0.071	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Fluoranthene	0.014	J	0.043	0.0081	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Fluorene	<0.043		0.043	0.0061	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Hexachlorobenzene	<0.088		0.088	0.010	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Hexachlorocyclopentadiene	<0.88		0.88	0.25	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Hexachloroethane	<0.22		0.22	0.066	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05

Lab Sample ID: 500-172990-1

Date Collected: 11/05/19 10:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 74.6

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	<0.043		0.043	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Isophorone	<0.22		0.22	0.049	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Naphthalene	<0.043		0.043	0.0067	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
N-Nitrosodi-n-propylamine	<0.088		0.088	0.053	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Pentachlorophenol	<0.88		0.88	0.70	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Phenanthrene	0.0067	J	0.043	0.0061	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Phenol	<0.22		0.22	0.097	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Pyrene	0.013	J	0.043	0.0087	mg/Kg	☼	11/17/19 14:28	11/19/19 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		31 - 143				11/17/19 14:28	11/19/19 14:43	1
2-Fluorobiphenyl	85		43 - 145				11/17/19 14:28	11/19/19 14:43	1
2-Fluorophenol	115		31 - 166				11/17/19 14:28	11/19/19 14:43	1
Nitrobenzene-d5	80		37 - 147				11/17/19 14:28	11/19/19 14:43	1
Phenol-d5	98		30 - 153				11/17/19 14:28	11/19/19 14:43	1
Terphenyl-d14	95		42 - 157				11/17/19 14:28	11/19/19 14:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.3	0.25	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Arsenic	9.3		0.64	0.22	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Barium	68		0.64	0.073	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Beryllium	0.72		0.26	0.060	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Boron	12		3.2	0.30	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Cadmium	0.28		0.13	0.023	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Calcium	60000	B	130	22	mg/Kg	☼	11/15/19 08:51	11/18/19 11:23	10
Chromium	17		0.64	0.32	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Cobalt	14		0.32	0.084	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Copper	26		0.64	0.18	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Iron	24000		13	6.6	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Lead	24		0.32	0.15	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Magnesium	30000		6.4	3.2	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Manganese	690		0.64	0.093	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Nickel	31		0.64	0.19	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Potassium	2900		32	11	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Selenium	0.70		0.64	0.38	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Silver	3.0		0.32	0.082	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Sodium	210		64	9.5	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Thallium	0.67		0.64	0.32	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Vanadium	23		0.32	0.075	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	1
Zinc	82		1.3	0.56	mg/Kg	☼	11/15/19 08:51	11/15/19 23:43	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		11/08/19 15:37	11/12/19 15:09	1
Barium	<0.50		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 15:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 15:09	1
Boron	<0.10		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 15:09	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05

Lab Sample ID: 500-172990-1

Date Collected: 11/05/19 10:15

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 74.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 15:09	1
Calcium	16		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:09	1
Chromium	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:09	1
Cobalt	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:09	1
Iron	2.1		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 15:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 15:09	1
Manganese	0.010	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:09	1
Nickel	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:09	1
Potassium	1.2	J	2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:09	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 15:09	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:09	1
Zinc	0.024	J	0.50	0.020	mg/L		11/08/19 15:37	11/12/19 15:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/11/19 10:30	11/12/19 09:44	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	☼	11/07/19 14:15	11/08/19 09:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.23	mg/Kg	☼	11/19/19 13:10	11/19/19 16:09	1
pH	7.2		0.2	0.2	SU			11/08/19 16:54	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05 Dup

Lab Sample ID: 500-172990-2

Date Collected: 11/05/19 10:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Chloroethane	<0.0048 *		0.0048	0.0014	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/06/19 19:45	11/16/19 01:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/06/19 19:45	11/16/19 01:51	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/06/19 19:45	11/16/19 01:51	1
Dibromofluoromethane	93		75 - 126	11/06/19 19:45	11/16/19 01:51	1
Toluene-d8 (Surr)	97		75 - 124	11/06/19 19:45	11/16/19 01:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05 Dup

Lab Sample ID: 500-172990-2

Date Collected: 11/05/19 10:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05 Dup

Lab Sample ID: 500-172990-2

Date Collected: 11/05/19 10:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Phenanthrene	<0.040		0.040	0.0055	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/17/19 14:28	11/19/19 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	68		31 - 143	11/17/19 14:28	11/19/19 15:12	1
2-Fluorobiphenyl	69		43 - 145	11/17/19 14:28	11/19/19 15:12	1
2-Fluorophenol	95		31 - 166	11/17/19 14:28	11/19/19 15:12	1
Nitrobenzene-d5	71		37 - 147	11/17/19 14:28	11/19/19 15:12	1
Phenol-d5	82		30 - 153	11/17/19 14:28	11/19/19 15:12	1
Terphenyl-d14	86		42 - 157	11/17/19 14:28	11/19/19 15:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.2	0.24	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Arsenic	13		0.61	0.21	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Barium	62		0.61	0.070	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Beryllium	0.69		0.24	0.057	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Boron	9.2		3.1	0.29	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Cadmium	0.16		0.12	0.022	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Calcium	53000	B	120	21	mg/Kg	☼	11/15/19 08:51	11/18/19 11:27	10
Chromium	17		0.61	0.30	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Cobalt	13		0.31	0.080	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Copper	27		0.61	0.17	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Iron	26000		12	6.4	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Lead	19		0.31	0.14	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Magnesium	26000		6.1	3.0	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Manganese	710		0.61	0.089	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Nickel	31		0.61	0.18	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Potassium	2300		31	11	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Selenium	0.73		0.61	0.36	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Silver	3.3		0.31	0.079	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Sodium	190		61	9.1	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Thallium	0.95		0.61	0.31	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Vanadium	24		0.31	0.072	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	1
Zinc	81		1.2	0.54	mg/Kg	☼	11/15/19 08:51	11/15/19 23:47	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		11/14/19 15:55	11/15/19 21:51	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Client Sample ID: 3222V-10-B05 Dup

Lab Sample ID: 500-172990-2

Date Collected: 11/05/19 10:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 15:13	1
Barium	<0.50		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 15:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 15:13	1
Boron	<0.10		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 15:13	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 15:13	1
Calcium	13		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:13	1
Chromium	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:13	1
Cobalt	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:13	1
Iron	8.2		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 15:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 15:13	1
Manganese	0.064		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:13	1
Nickel	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:13	1
Potassium	2.2 J		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:13	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 15:13	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:13	1
Zinc	0.033 J		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 15:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/11/19 10:30	11/12/19 09:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.019	0.0065	mg/Kg	☼	11/07/19 14:15	11/08/19 09:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.28	mg/Kg	☼	11/19/19 13:10	11/19/19 16:09	1
pH	7.6		0.2	0.2	SU			11/08/19 16:57	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172990-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	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 - AE7-029

Job ID: 500-172990-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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

ANALYTICAL REPORT

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

Laboratory Job ID: 500-173112-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
11/25/2019 8:06:24 AM

Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B09

Lab Sample ID: 500-173112-5

Date Collected: 11/06/19 11:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/07/19 18:30	11/19/19 15:59	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/07/19 18:30	11/19/19 15:59	1
Dibromofluoromethane	95		75 - 126	11/07/19 18:30	11/19/19 15:59	1
Toluene-d8 (Surr)	96		75 - 124	11/07/19 18:30	11/19/19 15:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B09

Lab Sample ID: 500-173112-5

Date Collected: 11/06/19 11:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B09

Lab Sample ID: 500-173112-5

Date Collected: 11/06/19 11:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/18/19 08:17	11/20/19 15:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	96		31 - 143				11/18/19 08:17	11/20/19 15:18	1
2-Fluorobiphenyl	87		43 - 145				11/18/19 08:17	11/20/19 15:18	1
2-Fluorophenol	90		31 - 166				11/18/19 08:17	11/20/19 15:18	1
Nitrobenzene-d5	73		37 - 147				11/18/19 08:17	11/20/19 15:18	1
Phenol-d5	78		30 - 153				11/18/19 08:17	11/20/19 15:18	1
Terphenyl-d14	91		42 - 157				11/18/19 08:17	11/20/19 15:18	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	☼	11/19/19 17:37	11/20/19 17:35	1
Arsenic	8.3		0.59	0.20	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Barium	45		0.59	0.067	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Beryllium	0.62		0.23	0.055	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Boron	11		2.9	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Cadmium	0.15	B	0.12	0.021	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Calcium	67000	B	120	20	mg/Kg	☼	11/19/19 17:37	11/21/19 10:52	10
Chromium	15	B	0.59	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Cobalt	13		0.29	0.077	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Copper	21		0.59	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Iron	20000	B	12	6.1	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Lead	19		0.29	0.14	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Magnesium	31000		5.9	2.9	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Manganese	430		0.59	0.085	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Nickel	31		0.59	0.17	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Potassium	2300		29	10	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Silver	2.7		0.29	0.076	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Sodium	120		59	8.7	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Thallium	0.78		0.59	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Vanadium	21		0.29	0.069	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1
Zinc	70		1.2	0.51	mg/Kg	☼	11/19/19 17:37	11/20/19 17:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:13	11/19/19 03:08	1
Iron	<0.40		0.40	0.20	mg/L		11/15/19 15:13	11/19/19 03:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:13	11/19/19 03:08	1
Manganese	0.54		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 03:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B09

Lab Sample ID: 500-173112-5

Date Collected: 11/06/19 11:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 03:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.049	J	0.050	0.010	mg/L		11/14/19 15:45	11/16/19 00:29	1
Barium	0.40	J	0.50	0.050	mg/L		11/14/19 15:45	11/16/19 00:29	1
Beryllium	0.0044		0.0040	0.0040	mg/L		11/14/19 15:45	11/16/19 00:29	1
Boron	0.15		0.10	0.050	mg/L		11/14/19 15:45	11/16/19 00:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/14/19 15:45	11/16/19 00:29	1
Calcium	27		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:29	1
Chromium	0.10		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:29	1
Cobalt	0.037		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:29	1
Iron	120		0.40	0.20	mg/L		11/14/19 15:45	11/16/19 00:29	1
Lead	0.075		0.0075	0.0075	mg/L		11/14/19 15:45	11/16/19 00:29	1
Manganese	0.48		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:29	1
Nickel	0.13		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:29	1
Potassium	26		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:29	1
Selenium	<0.050		0.050	0.020	mg/L		11/14/19 15:45	11/16/19 00:29	1
Silver	0.010	J	0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:29	1
Zinc	0.32	J	0.50	0.020	mg/L		11/14/19 15:45	11/16/19 00:29	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		11/15/19 15:13	11/20/19 17:31	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		11/14/19 15:45	11/20/19 12:28	1
Thallium	0.0027		0.0020	0.0020	mg/L		11/14/19 15:45	11/20/19 12:28	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		11/18/19 10:10	11/19/19 09:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.017	0.0057	mg/Kg	☼	11/15/19 14:20	11/18/19 08:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	11/20/19 10:45	11/20/19 15:32	1
pH	7.6		0.2	0.2	SU			11/13/19 14:43	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B07

Lab Sample ID: 500-173112-7

Date Collected: 11/06/19 11:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Chloroethane	<0.0037 *		0.0037	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	11/07/19 18:30	11/19/19 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/07/19 18:30	11/19/19 16:49	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/07/19 18:30	11/19/19 16:49	1
Dibromofluoromethane	95		75 - 126	11/07/19 18:30	11/19/19 16:49	1
Toluene-d8 (Surr)	96		75 - 124	11/07/19 18:30	11/19/19 16:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B07

Lab Sample ID: 500-173112-7

Date Collected: 11/06/19 11:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2,4-Dinitrophenol	<0.77	*	0.77	0.67	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B07

Lab Sample ID: 500-173112-7

Date Collected: 11/06/19 11:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	11/18/19 08:17	11/20/19 16:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	96		31 - 143				11/18/19 08:17	11/20/19 16:13	1
2-Fluorobiphenyl	69		43 - 145				11/18/19 08:17	11/20/19 16:13	1
2-Fluorophenol	79		31 - 166				11/18/19 08:17	11/20/19 16:13	1
Nitrobenzene-d5	58		37 - 147				11/18/19 08:17	11/20/19 16:13	1
Phenol-d5	63		30 - 153				11/18/19 08:17	11/20/19 16:13	1
Terphenyl-d14	87		42 - 157				11/18/19 08:17	11/20/19 16:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.1	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Arsenic	6.9		0.57	0.20	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Barium	39		0.57	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Beryllium	0.63		0.23	0.054	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Boron	12		2.9	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Cadmium	0.14	B	0.11	0.021	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Calcium	73000	B	110	19	mg/Kg	☼	11/19/19 17:37	11/21/19 10:56	10
Chromium	16	B	0.57	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Cobalt	13		0.29	0.075	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Copper	19		0.57	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Iron	19000	B	11	6.0	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Lead	12		0.29	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Magnesium	32000		5.7	2.9	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Manganese	390		0.57	0.083	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Nickel	30		0.57	0.17	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Potassium	2500		29	10	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Silver	2.5		0.29	0.074	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Sodium	610		57	8.5	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Thallium	0.91		0.57	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Vanadium	20		0.29	0.068	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	1
Zinc	61		1.1	0.50	mg/Kg	☼	11/19/19 17:37	11/20/19 17:42	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		11/15/19 15:13	11/19/19 04:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:13	11/19/19 04:46	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 04:46	1
Iron	2.2		0.40	0.20	mg/L		11/15/19 15:13	11/19/19 04:46	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B07

Lab Sample ID: 500-173112-7

Date Collected: 11/06/19 11:15

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:13	11/19/19 04:46	1
Manganese	3.5		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 04:46	1
Nickel	0.039		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 04:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.093		0.050	0.010	mg/L		11/14/19 15:45	11/16/19 00:38	1
Barium	0.60		0.50	0.050	mg/L		11/14/19 15:45	11/16/19 00:38	1
Beryllium	0.0068		0.0040	0.0040	mg/L		11/14/19 15:45	11/16/19 00:38	1
Boron	0.20		0.10	0.050	mg/L		11/14/19 15:45	11/16/19 00:38	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/14/19 15:45	11/16/19 00:38	1
Calcium	61		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:38	1
Chromium	0.17		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:38	1
Cobalt	0.065		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:38	1
Iron	220		0.40	0.20	mg/L		11/14/19 15:45	11/16/19 00:38	1
Lead	0.099		0.0075	0.0075	mg/L		11/14/19 15:45	11/16/19 00:38	1
Manganese	0.91		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:38	1
Nickel	0.25		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:38	1
Potassium	37		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:38	1
Selenium	<0.050		0.050	0.020	mg/L		11/14/19 15:45	11/16/19 00:38	1
Silver	0.018	J	0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:38	1
Zinc	0.63		0.50	0.020	mg/L		11/14/19 15:45	11/16/19 00:38	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		11/15/19 15:13	11/20/19 17:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/14/19 15:45	11/20/19 12:33	1
Thallium	0.0047		0.0020	0.0020	mg/L		11/14/19 15:45	11/20/19 12:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00038		0.00020	0.00020	mg/L		11/18/19 10:10	11/19/19 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.018	0.0061	mg/Kg	☼	11/15/19 14:20	11/18/19 08:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.28	mg/Kg	☼	11/20/19 10:45	11/20/19 15:33	1
pH	8.3		0.2	0.2	SU			11/13/19 14:46	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B06

Lab Sample ID: 500-173112-8

Date Collected: 11/06/19 11:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1
Xylenes, Total	0.00053	J	0.0031	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/07/19 18:30	11/19/19 17:15	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/07/19 18:30	11/19/19 17:15	1
Dibromofluoromethane	97		75 - 126	11/07/19 18:30	11/19/19 17:15	1
Toluene-d8 (Surr)	93		75 - 124	11/07/19 18:30	11/19/19 17:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B06

Lab Sample ID: 500-173112-8

Date Collected: 11/06/19 11:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B06

Lab Sample ID: 500-173112-8

Date Collected: 11/06/19 11:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/18/19 08:17	11/20/19 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		31 - 143	11/18/19 08:17	11/20/19 16:40	1
2-Fluorobiphenyl	81		43 - 145	11/18/19 08:17	11/20/19 16:40	1
2-Fluorophenol	83		31 - 166	11/18/19 08:17	11/20/19 16:40	1
Nitrobenzene-d5	69		37 - 147	11/18/19 08:17	11/20/19 16:40	1
Phenol-d5	73		30 - 153	11/18/19 08:17	11/20/19 16:40	1
Terphenyl-d14	93		42 - 157	11/18/19 08:17	11/20/19 16:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.2	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Arsenic	7.0		0.58	0.20	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Barium	36		0.58	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Beryllium	0.66		0.23	0.054	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Boron	12		2.9	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Cadmium	0.098	J B	0.12	0.021	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Calcium	74000	B	120	20	mg/Kg	☼	11/19/19 17:37	11/21/19 11:00	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Cobalt	8.9		0.29	0.076	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Copper	21		0.58	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Iron	18000	B	12	6.0	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Lead	12		0.29	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Magnesium	33000		5.8	2.9	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Manganese	310		0.58	0.084	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Nickel	25		0.58	0.17	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Potassium	2600		29	10	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Silver	2.6		0.29	0.074	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Sodium	400		58	8.5	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Thallium	0.69		0.58	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Vanadium	21		0.29	0.068	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1
Zinc	64		1.2	0.51	mg/Kg	☼	11/19/19 17:37	11/20/19 17:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		11/15/19 15:13	11/19/19 03:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/15/19 15:13	11/19/19 03:17	1
Manganese	0.50		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 03:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Client Sample ID: 3222V-10-B06

Lab Sample ID: 500-173112-8

Date Collected: 11/06/19 11:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.046	J	0.050	0.010	mg/L		11/14/19 15:45	11/16/19 00:42	1
Barium	0.30	J	0.50	0.050	mg/L		11/14/19 15:45	11/16/19 00:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:45	11/16/19 00:42	1
Boron	0.14		0.10	0.050	mg/L		11/14/19 15:45	11/16/19 00:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/14/19 15:45	11/16/19 00:42	1
Calcium	29		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:42	1
Chromium	0.090		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:42	1
Cobalt	0.023	J	0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:42	1
Iron	100		0.40	0.20	mg/L		11/14/19 15:45	11/16/19 00:42	1
Lead	0.050		0.0075	0.0075	mg/L		11/14/19 15:45	11/16/19 00:42	1
Manganese	0.33		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:42	1
Nickel	0.094		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:42	1
Potassium	23		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:42	1
Selenium	<0.050		0.050	0.020	mg/L		11/14/19 15:45	11/16/19 00:42	1
Silver	<0.025		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:42	1
Zinc	0.28	J	0.50	0.020	mg/L		11/14/19 15:45	11/16/19 00:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/14/19 15:45	11/20/19 12:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:45	11/20/19 12:36	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		11/18/19 10:10	11/19/19 09:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.018	0.0060	mg/Kg	☼	11/15/19 14:20	11/18/19 08:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.23	mg/Kg	☼	11/20/19 10:45	11/20/19 15:33	1
pH	7.6		0.2	0.2	SU			11/13/19 14:47	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

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

Metals

Qualifier	Qualifier Description
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.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173112-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

240 South Sutton Road

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99289 Longitude: -88.20771
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 60

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)]:

LOCATION 3222V-11-B01 WAS SAMPLED ADJACENT TO SITE 3222V-11. SEE TABLE 3f AND FIGURE 4 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBER: 500-173113-1.

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:

Jan 12, 2022

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

ISGS Site 3222V-11

Hanover Township Senior Center

Sample ID	3222V-11-B01	Maximum Allowable Concentration				
Sample Depth (ft)	0-3					
Sample Date	11/6/2019	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
PID	0					
Sample pH	8.7					
Matrix	Soil					
No Contaminants of Concern Noted.						

ANALYTICAL REPORT

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

Laboratory Job ID: 500-173113-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/21/2019 5:24:24 PM

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

LINKS

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173113-1

Client Sample ID: 3222V-11-B01

Lab Sample ID: 500-173113-1

Date Collected: 11/06/19 11:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Acetone	0.0067	J	0.015	0.0066	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	11/07/19 18:30	11/19/19 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/07/19 18:30	11/19/19 20:35	1
4-Bromofluorobenzene (Surr)	96		75 - 131	11/07/19 18:30	11/19/19 20:35	1
Dibromofluoromethane	91		75 - 126	11/07/19 18:30	11/19/19 20:35	1
Toluene-d8 (Surr)	91		75 - 124	11/07/19 18:30	11/19/19 20:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173113-1

Client Sample ID: 3222V-11-B01

Lab Sample ID: 500-173113-1

Date Collected: 11/06/19 11:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2,4-Dinitrophenol	<0.77	*	0.77	0.67	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173113-1

Client Sample ID: 3222V-11-B01

Lab Sample ID: 500-173113-1

Date Collected: 11/06/19 11:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	11/18/19 08:17	11/20/19 13:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		31 - 143	11/18/19 08:17	11/20/19 13:03	1
2-Fluorobiphenyl	72		43 - 145	11/18/19 08:17	11/20/19 13:03	1
2-Fluorophenol	74		31 - 166	11/18/19 08:17	11/20/19 13:03	1
Nitrobenzene-d5	65		37 - 147	11/18/19 08:17	11/20/19 13:03	1
Phenol-d5	62		30 - 153	11/18/19 08:17	11/20/19 13:03	1
Terphenyl-d14	91		42 - 157	11/18/19 08:17	11/20/19 13:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J	1.1	0.22	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Arsenic	7.2		0.57	0.20	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Barium	33		0.57	0.066	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Beryllium	0.56		0.23	0.054	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Boron	10		2.9	0.27	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Cadmium	0.16	B	0.11	0.021	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Calcium	79000	B	110	19	mg/Kg	☼	11/19/19 17:37	11/21/19 10:28	10
Chromium	14	B	0.57	0.28	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Cobalt	14		0.29	0.075	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Copper	19		0.57	0.16	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Iron	18000	B	11	6.0	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Lead	12		0.29	0.13	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Magnesium	34000		5.7	2.9	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Manganese	380		0.57	0.083	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Nickel	27		0.57	0.17	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Potassium	2100		29	10	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Silver	2.4		0.29	0.074	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Sodium	660		57	8.5	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Thallium	0.84		0.57	0.29	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Vanadium	18		0.29	0.068	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	1
Zinc	64		1.1	0.50	mg/Kg	☼	11/19/19 17:37	11/20/19 17:50	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		11/15/19 15:13	11/19/19 04:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/15/19 15:13	11/19/19 04:50	1
Chromium	<0.025		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 04:50	1
Iron	<0.40		0.40	0.20	mg/L		11/15/19 15:13	11/19/19 04:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173113-1

Client Sample ID: 3222V-11-B01

Lab Sample ID: 500-173113-1

Date Collected: 11/06/19 11:25

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 86.1

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		11/15/19 15:13	11/19/19 04:50	1
Manganese	3.6		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 04:50	1
Nickel	0.040		0.025	0.010	mg/L		11/15/19 15:13	11/19/19 04:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.10		0.050	0.010	mg/L		11/14/19 15:45	11/16/19 00:46	1
Barium	0.59		0.50	0.050	mg/L		11/14/19 15:45	11/16/19 00:46	1
Beryllium	0.0075		0.0040	0.0040	mg/L		11/14/19 15:45	11/16/19 00:46	1
Boron	0.20		0.10	0.050	mg/L		11/14/19 15:45	11/16/19 00:46	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/14/19 15:45	11/16/19 00:46	1
Calcium	62		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:46	1
Chromium	0.17		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:46	1
Cobalt	0.053		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:46	1
Iron	230		0.40	0.20	mg/L		11/14/19 15:45	11/16/19 00:46	1
Lead	0.10		0.0075	0.0075	mg/L		11/14/19 15:45	11/16/19 00:46	1
Manganese	0.81		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:46	1
Nickel	0.24		0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:46	1
Potassium	38		2.5	0.50	mg/L		11/14/19 15:45	11/16/19 00:46	1
Selenium	<0.050		0.050	0.020	mg/L		11/14/19 15:45	11/16/19 00:46	1
Silver	0.020	J	0.025	0.010	mg/L		11/14/19 15:45	11/16/19 00:46	1
Zinc	0.71		0.50	0.020	mg/L		11/14/19 15:45	11/16/19 00:46	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		11/15/19 15:13	11/20/19 17:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/14/19 15:45	11/20/19 12:45	1
Thallium	0.0043		0.0020	0.0020	mg/L		11/14/19 15:45	11/20/19 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00028		0.00020	0.00020	mg/L		11/15/19 10:05	11/18/19 10:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.018	0.0060	mg/Kg	☼	11/14/19 15:30	11/15/19 08:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.28	mg/Kg	☼	11/20/19 10:45	11/20/19 15:30	1
pH	8.7		0.2	0.2	SU			11/13/19 14:48	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173113-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	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 - AE7-029

Job ID: 500-173113-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

1056 W Elmwood Ln, 250-266 S Elmwood Ln, 1024-1048 W Maplewood Ln, 210-234 S Maplewood Ln, 205-212 S Park Place

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99439 Longitude: -88.20688
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 1,317

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 3222V-20-B01, -B03, -B05, -B06, -B07, -B08, -B09, -B10, -B11 AND -B12 WERE SAMPLED ADJACENT TO SITE 3222V-20. SEE TABLE 3g AND FIGURES 2 THRU 4 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-173107-1 AND 500-172986-1.

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

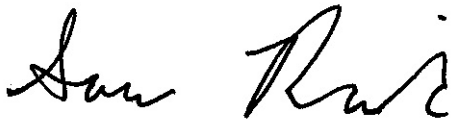
I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the 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:

Jan 12, 2022

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

ISGS Site 3222V-20

Residences

Sample ID	3222V-20-B01	3222V-20-B01 DUP	3222V-20-B03	3222V-20-B05	3222V-20-B06	Maximum Allowable Concentration					
Sample Depth (ft)	0-4	0-4	0-4	0-4	0-4	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area	
Sample Date	11/6/2019	11/6/2019	11/6/2019	11/5/2019	11/5/2019						
PID	0	0	0	0	0						
Sample pH	8.3	8.1	7.1	8.2	8.2						
Matrix	Soil	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	ND	ND	J 0.032	J 0.026	0.16	1,2	0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)											
Arsenic	10	8.9	6.6	8.6	7.1		11.3	--	11.3	--	13

Sample ID	3222V-20-B07	3222V-20-B08	3222V-20-B09	3222V-20-B10	3222V-20-B11	Maximum Allowable Concentration					
Sample Depth (ft)	0-4	0-5	0-5	0-5	0-5	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area	
Sample Date	11/5/2019	11/5/2019	11/5/2019	11/5/2019	11/5/2019						
PID	0	0	0	0	0						
Sample pH	7.9	8.4	8.6	7.6	7.3						
Matrix	Soil	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	J 0.011	ND	J 0.019	ND	ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)											
Arsenic	8.6	7.8	7.5	12	1,3	6.6	11.3	--	11.3	--	13

Sample ID	3222V-20-B11 DUP	3222V-20-B12-1	3222V-20-B12-2	3222V-20-B12-3	Maximum Allowable Concentration					
Sample Depth (ft)	0-5	0-5	5-10	10-15	1 Most Stringent	2 Outside a Populated Area	3 Within a Populated non-Metropolitan Statistical Area	4 Within Chicago Corporate Limits	5 Within a Metropolitan Statistical Area	
Sample Date	11/5/2019	11/6/2019	11/6/2019	11/6/2019						
PID	0	0	0	0						
Sample pH	7.3	7.9	7.6	7.5						
Matrix	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	J 0.012	ND	ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)										
Arsenic	6.7	9.2	8.5	6.7		11.3	--	11.3	--	13

ANALYTICAL REPORT

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

Laboratory Job ID: 500-173107-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/21/2019 5:33:20 PM

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

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01

Lab Sample ID: 500-173107-1

Date Collected: 11/06/19 12:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Acetone	0.028		0.016	0.0069	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Methylene Chloride	0.0027 J		0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 05:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/07/19 18:30	11/16/19 05:12	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/07/19 18:30	11/16/19 05:12	1
Dibromofluoromethane	95		75 - 126	11/07/19 18:30	11/16/19 05:12	1
Toluene-d8 (Surr)	95		75 - 124	11/07/19 18:30	11/16/19 05:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01

Lab Sample ID: 500-173107-1

Date Collected: 11/06/19 12:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2,4-Dinitrophenol	<0.79	F2	0.79	0.69	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Benzo[g,h,i]perylene	<0.039	F1	0.039	0.013	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01

Lab Sample ID: 500-173107-1

Date Collected: 11/06/19 12:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/18/19 16:53	11/21/19 15:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	50		31 - 143				11/18/19 16:53	11/21/19 15:00	1
2-Fluorobiphenyl	81		43 - 145				11/18/19 16:53	11/21/19 15:00	1
2-Fluorophenol	81		31 - 166				11/18/19 16:53	11/21/19 15:00	1
Nitrobenzene-d5	62		37 - 147				11/18/19 16:53	11/21/19 15:00	1
Phenol-d5	71		30 - 153				11/18/19 16:53	11/21/19 15:00	1
Terphenyl-d14	90		42 - 157				11/18/19 16:53	11/21/19 15:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J F1	1.2	0.23	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Arsenic	10	F1	0.58	0.20	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Barium	57	F1	0.58	0.066	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Beryllium	0.69		0.23	0.054	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Boron	9.6	F1	2.9	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Cadmium	0.17	B	0.12	0.021	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Calcium	62000	F2	120	20	mg/Kg	☼	11/19/19 17:41	11/21/19 11:40	10
Chromium	16	F1 F2 B	0.58	0.29	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Cobalt	14		0.29	0.076	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Copper	24	F1	0.58	0.16	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Iron	22000	B	12	6.0	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Lead	14	F1	0.29	0.13	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Magnesium	31000		5.8	2.9	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Manganese	500	F2	0.58	0.084	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Nickel	34		0.58	0.17	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Potassium	2200	F1	29	10	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Selenium	<0.58	F1	0.58	0.34	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Silver	2.9		0.29	0.075	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Sodium	520	F1	58	8.6	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Thallium	0.74	F1 F2	0.58	0.29	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Vanadium	21	F1 F2	0.29	0.069	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	1
Zinc	77	F1	1.2	0.51	mg/Kg	☼	11/19/19 17:41	11/20/19 15:02	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		11/12/19 15:25	11/13/19 19:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/12/19 15:25	11/13/19 19:18	1
Chromium	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:18	1
Iron	<0.40		0.40	0.20	mg/L		11/12/19 15:25	11/13/19 19:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01

Lab Sample ID: 500-173107-1

Date Collected: 11/06/19 12:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.7

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		11/12/19 15:25	11/13/19 19:18	1
Manganese	0.37		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:18	1
Nickel	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.088		0.050	0.010	mg/L		11/12/19 15:23	11/13/19 11:39	1
Barium	0.69		0.50	0.050	mg/L		11/12/19 15:23	11/13/19 18:33	1
Beryllium	0.0073		0.0040	0.0040	mg/L		11/12/19 15:23	11/13/19 11:39	1
Boron	0.25		0.10	0.050	mg/L		11/12/19 15:23	11/13/19 11:39	1
Cadmium	0.0022	J	0.0050	0.0020	mg/L		11/12/19 15:23	11/13/19 11:39	1
Calcium	22		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 11:39	1
Chromium	0.17		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:39	1
Cobalt	0.056		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:33	1
Iron	180		0.40	0.20	mg/L		11/12/19 15:23	11/13/19 11:39	1
Lead	0.052		0.0075	0.0075	mg/L		11/12/19 15:23	11/13/19 11:39	1
Manganese	0.79		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:33	1
Nickel	0.21		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:33	1
Potassium	41		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 18:33	1
Selenium	<0.050		0.050	0.020	mg/L		11/12/19 15:23	11/13/19 11:39	1
Silver	<0.025		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:39	1
Zinc	0.49	J	0.50	0.020	mg/L		11/12/19 15:23	11/13/19 11:39	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		11/12/19 15:25	11/20/19 12:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/12/19 15:23	11/20/19 11:52	1
Thallium	0.0053		0.0020	0.0020	mg/L		11/12/19 15:23	11/19/19 22:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00035		0.00020	0.00020	mg/L		11/13/19 11:15	11/14/19 10:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.018	0.0058	mg/Kg	☼	11/15/19 14:20	11/18/19 07:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.29	mg/Kg	☼	11/20/19 14:10	11/20/19 17:24	1
pH	8.3		0.2	0.2	SU			11/13/19 14:16	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01 Dup

Lab Sample ID: 500-173107-2

Date Collected: 11/06/19 12:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00070	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00094	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
1,1-Dichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
1,1-Dichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00077	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
2-Butanone (MEK)	<0.0055		0.0055	0.0024	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Acetone	<0.022		0.022	0.0096	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Benzene	<0.0022		0.0022	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Bromoform	<0.0022		0.0022	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Carbon disulfide	<0.0055		0.0055	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Chlorobenzene	<0.0022		0.0022	0.00081	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Chloroethane	<0.0055 *		0.0055	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Chloroform	<0.0022		0.0022	0.00076	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Dibromochloromethane	<0.0022		0.0022	0.00072	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Methylene Chloride	0.0023	J	0.0055	0.0022	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Tetrachloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00097	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00077	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Trichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Vinyl chloride	<0.0022		0.0022	0.00097	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1
Xylenes, Total	<0.0044		0.0044	0.00070	mg/Kg	☼	11/07/19 18:30	11/16/19 05:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/07/19 18:30	11/16/19 05:37	1
4-Bromofluorobenzene (Surr)	88		75 - 131	11/07/19 18:30	11/16/19 05:37	1
Dibromofluoromethane	95		75 - 126	11/07/19 18:30	11/16/19 05:37	1
Toluene-d8 (Surr)	94		75 - 124	11/07/19 18:30	11/16/19 05:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01 Dup

Lab Sample ID: 500-173107-2

Date Collected: 11/06/19 12:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01 Dup

Lab Sample ID: 500-173107-2

Date Collected: 11/06/19 12:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Pentachlorophenol	<0.79		0.79	0.62	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/18/19 16:53	11/21/19 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	53		31 - 143	11/18/19 16:53	11/21/19 12:18	1
2-Fluorobiphenyl	87		43 - 145	11/18/19 16:53	11/21/19 12:18	1
2-Fluorophenol	88		31 - 166	11/18/19 16:53	11/21/19 12:18	1
Nitrobenzene-d5	74		37 - 147	11/18/19 16:53	11/21/19 12:18	1
Phenol-d5	76		30 - 153	11/18/19 16:53	11/21/19 12:18	1
Terphenyl-d14	97		42 - 157	11/18/19 16:53	11/21/19 12:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.1	0.21	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Arsenic	8.9		0.55	0.19	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Barium	52		0.55	0.063	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Beryllium	0.68		0.22	0.051	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Boron	11		2.8	0.26	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Cadmium	0.15	B	0.11	0.020	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Calcium	71000		110	19	mg/Kg	☼	11/19/19 17:41	11/21/19 12:00	10
Chromium	16	B	0.55	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Cobalt	12		0.28	0.072	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Copper	21		0.55	0.15	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Iron	20000	B	11	5.7	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Lead	13		0.28	0.13	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Magnesium	33000		5.5	2.7	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Manganese	400		0.55	0.080	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Nickel	31		0.55	0.16	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Potassium	2400		28	9.7	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Silver	2.7		0.28	0.071	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Sodium	390		55	8.1	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Thallium	0.66		0.55	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Vanadium	21		0.28	0.065	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	1
Zinc	74		1.1	0.48	mg/Kg	☼	11/19/19 17:41	11/20/19 15:22	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		11/12/19 15:25	11/13/19 19:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/12/19 15:25	11/13/19 19:22	1
Chromium	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:22	1
Iron	<0.40		0.40	0.20	mg/L		11/12/19 15:25	11/13/19 19:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B01 Dup

Lab Sample ID: 500-173107-2

Date Collected: 11/06/19 12:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/12/19 15:25	11/13/19 19:22	1
Manganese	0.54		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:22	1
Nickel	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.090		0.050	0.010	mg/L		11/12/19 15:23	11/13/19 11:43	1
Barium	0.75		0.50	0.050	mg/L		11/12/19 15:23	11/13/19 18:37	1
Beryllium	0.0078		0.0040	0.0040	mg/L		11/12/19 15:23	11/13/19 11:43	1
Boron	0.22		0.10	0.050	mg/L		11/12/19 15:23	11/13/19 11:43	1
Cadmium	0.0022	J	0.0050	0.0020	mg/L		11/12/19 15:23	11/13/19 11:43	1
Calcium	26		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 11:43	1
Chromium	0.18		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:43	1
Cobalt	0.058		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:37	1
Iron	180		0.40	0.20	mg/L		11/12/19 15:23	11/13/19 11:43	1
Lead	0.059		0.0075	0.0075	mg/L		11/12/19 15:23	11/13/19 11:43	1
Manganese	0.89		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:37	1
Nickel	0.22		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:37	1
Potassium	45		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 18:37	1
Selenium	<0.050		0.050	0.020	mg/L		11/12/19 15:23	11/13/19 11:43	1
Silver	<0.025		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:43	1
Zinc	0.54		0.50	0.020	mg/L		11/12/19 15:23	11/13/19 11:43	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		11/12/19 15:25	11/20/19 13:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/12/19 15:23	11/20/19 11:55	1
Thallium	0.0041		0.0020	0.0020	mg/L		11/12/19 15:23	11/19/19 22:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00038		0.00020	0.00020	mg/L		11/13/19 11:15	11/14/19 10:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0063	mg/Kg	☼	11/15/19 14:20	11/18/19 07:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.25	mg/Kg	☼	11/20/19 14:10	11/20/19 17:25	1
pH	8.1		0.2	0.2	SU			11/13/19 14:18	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B03

Lab Sample ID: 500-173107-4

Date Collected: 11/06/19 12:20

Matrix: Solid

Date Received: 11/07/19 11:05

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	<0.0018		0.0018	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
2-Butanone (MEK)	0.0060		0.0046	0.0020	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Acetone	0.040		0.018	0.0080	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1
Xylenes, Total	<0.0037		0.0037	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 06:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	11/07/19 18:30	11/16/19 06:27	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/07/19 18:30	11/16/19 06:27	1
Dibromofluoromethane	91		75 - 126	11/07/19 18:30	11/16/19 06:27	1
Toluene-d8 (Surr)	97		75 - 124	11/07/19 18:30	11/16/19 06:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B03

Lab Sample ID: 500-173107-4

Date Collected: 11/06/19 12:20

Matrix: Solid

Date Received: 11/07/19 11:05

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	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Acenaphthylene	0.012	J	0.041	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Anthracene	0.0091	J	0.041	0.0068	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Benzo[a]pyrene	0.032	J	0.041	0.0079	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Benzo[b]fluoranthene	0.047		0.041	0.0088	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Benzo[g,h,i]perylene	0.034	J	0.041	0.013	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Benzo[k]fluoranthene	0.014	J	0.041	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Chrysene	0.035	J	0.041	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Fluoranthene	0.039	J	0.041	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Hexachlorocyclopentadiene	<0.82		0.82	0.24	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B03

Lab Sample ID: 500-173107-4

Date Collected: 11/06/19 12:20

Matrix: Solid

Date Received: 11/07/19 11:05

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	0.023	J	0.041	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Phenanthrene	0.017	J	0.041	0.0057	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Pyrene	0.039	J	0.041	0.0081	mg/Kg	☼	11/18/19 16:53	11/21/19 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	106		31 - 143				11/18/19 16:53	11/21/19 14:33	1
2-Fluorobiphenyl	90		43 - 145				11/18/19 16:53	11/21/19 14:33	1
2-Fluorophenol	83		31 - 166				11/18/19 16:53	11/21/19 14:33	1
Nitrobenzene-d5	67		37 - 147				11/18/19 16:53	11/21/19 14:33	1
Phenol-d5	74		30 - 153				11/18/19 16:53	11/21/19 14:33	1
Terphenyl-d14	96		42 - 157				11/18/19 16:53	11/21/19 14:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.2	0.22	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Arsenic	6.6		0.58	0.20	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Barium	100		0.58	0.066	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Beryllium	0.66		0.23	0.054	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Boron	4.5		2.9	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Cadmium	0.15	B	0.12	0.021	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Calcium	6900		12	2.0	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Chromium	15	B	0.58	0.29	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Cobalt	10		0.29	0.076	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Copper	17		0.58	0.16	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Iron	16000	B	12	6.0	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Lead	46		0.29	0.13	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Magnesium	4900		5.8	2.9	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Manganese	310		0.58	0.084	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Nickel	22		0.58	0.17	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Potassium	1400		29	10	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Selenium	0.46	J	0.58	0.34	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Silver	4.1		0.29	0.075	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Sodium	430		58	8.6	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Thallium	1.3		0.58	0.29	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Vanadium	27		0.29	0.068	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	1
Zinc	79		1.2	0.51	mg/Kg	☼	11/19/19 17:41	11/20/19 15:29	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		11/12/19 15:25	11/13/19 19:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/12/19 15:25	11/13/19 19:44	1
Chromium	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:44	1
Iron	<0.40		0.40	0.20	mg/L		11/12/19 15:25	11/13/19 19:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B03

Lab Sample ID: 500-173107-4

Date Collected: 11/06/19 12:20

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 80.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.021		0.0075	0.0075	mg/L		11/12/19 15:25	11/13/19 19:44	1
Manganese	11		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:44	1
Nickel	0.023	J	0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.052		0.050	0.010	mg/L		11/12/19 15:23	11/13/19 11:52	1
Barium	0.79		0.50	0.050	mg/L		11/12/19 15:23	11/13/19 18:45	1
Beryllium	0.0051		0.0040	0.0040	mg/L		11/12/19 15:23	11/13/19 11:52	1
Boron	0.13		0.10	0.050	mg/L		11/12/19 15:23	11/13/19 11:52	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/12/19 15:23	11/13/19 11:52	1
Calcium	23		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 11:52	1
Chromium	0.13		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:52	1
Cobalt	0.049		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:45	1
Iron	110		0.40	0.20	mg/L		11/12/19 15:23	11/13/19 11:52	1
Lead	0.18		0.0075	0.0075	mg/L		11/12/19 15:23	11/13/19 11:52	1
Manganese	1.6		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:45	1
Nickel	0.14		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:45	1
Potassium	23		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 18:45	1
Selenium	<0.050		0.050	0.020	mg/L		11/12/19 15:23	11/13/19 11:52	1
Silver	<0.025		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:52	1
Zinc	0.36	J	0.50	0.020	mg/L		11/12/19 15:23	11/13/19 11:52	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		11/12/19 15:25	11/20/19 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/12/19 15:23	11/19/19 22:30	1
Thallium	0.0021		0.0020	0.0020	mg/L		11/12/19 15:23	11/19/19 22:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/13/19 11:15	11/14/19 10:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.020	0.0065	mg/Kg	☼	11/15/19 14:20	11/18/19 07:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.27	mg/Kg	☼	11/20/19 14:10	11/20/19 17:26	1
pH	7.1		0.2	0.2	SU			11/13/19 14:19	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-1

Lab Sample ID: 500-173107-5

Date Collected: 11/06/19 13:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Chloroethane	<0.0048 *		0.0048	0.0014	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Methylene Chloride	0.0026 J		0.0048	0.0019	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/07/19 18:30	11/16/19 06:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/07/19 18:30	11/16/19 06:52	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/07/19 18:30	11/16/19 06:52	1
Dibromofluoromethane	95		75 - 126	11/07/19 18:30	11/16/19 06:52	1
Toluene-d8 (Surr)	95		75 - 124	11/07/19 18:30	11/16/19 06:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-1

Lab Sample ID: 500-173107-5

Date Collected: 11/06/19 13:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Benzo[a]pyrene	0.012	J	0.041	0.0079	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Benzo[b]fluoranthene	0.016	J	0.041	0.0088	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Chrysene	0.012	J	0.041	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Fluoranthene	0.020	J	0.041	0.0076	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Hexachlorocyclopentadiene	<0.82		0.82	0.24	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-1

Lab Sample ID: 500-173107-5

Date Collected: 11/06/19 13:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Phenanthrene	0.0067	J	0.041	0.0057	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Pyrene	0.015	J	0.041	0.0081	mg/Kg	☼	11/18/19 16:53	11/21/19 13:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	53		31 - 143				11/18/19 16:53	11/21/19 13:13	1
2-Fluorobiphenyl	82		43 - 145				11/18/19 16:53	11/21/19 13:13	1
2-Fluorophenol	84		31 - 166				11/18/19 16:53	11/21/19 13:13	1
Nitrobenzene-d5	68		37 - 147				11/18/19 16:53	11/21/19 13:13	1
Phenol-d5	70		30 - 153				11/18/19 16:53	11/21/19 13:13	1
Terphenyl-d14	88		42 - 157				11/18/19 16:53	11/21/19 13:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.1	0.22	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Arsenic	9.2		0.57	0.19	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Barium	69		0.57	0.065	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Beryllium	0.59		0.23	0.053	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Boron	4.7		2.8	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Cadmium	0.12	B	0.11	0.020	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Calcium	28000		11	1.9	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Chromium	15	B	0.57	0.28	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Cobalt	23		0.28	0.075	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Copper	19		0.57	0.16	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Iron	20000	B	11	5.9	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Lead	22		0.28	0.13	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Magnesium	17000		5.7	2.8	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Manganese	490		0.57	0.082	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Nickel	24		0.57	0.17	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Potassium	1300		28	10	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Selenium	0.37	J	0.57	0.33	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Silver	3.4		0.28	0.073	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Sodium	320		57	8.4	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Thallium	1.0		0.57	0.28	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Vanadium	24		0.28	0.067	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	1
Zinc	67		1.1	0.50	mg/Kg	☼	11/19/19 17:41	11/20/19 15:41	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		11/12/19 15:25	11/13/19 19:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/12/19 15:25	11/13/19 19:48	1
Chromium	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:48	1
Iron	<0.40		0.40	0.20	mg/L		11/12/19 15:25	11/13/19 19:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-1

Lab Sample ID: 500-173107-5

Date Collected: 11/06/19 13:00

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 80.6

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		11/12/19 15:25	11/13/19 19:48	1
Manganese	0.40		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:48	1
Nickel	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:48	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		11/12/19 15:23	11/13/19 11:56	1
Barium	0.78		0.50	0.050	mg/L		11/12/19 15:23	11/13/19 18:49	1
Beryllium	0.0066		0.0040	0.0040	mg/L		11/12/19 15:23	11/13/19 11:56	1
Boron	0.095	J	0.10	0.050	mg/L		11/12/19 15:23	11/13/19 11:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/12/19 15:23	11/13/19 11:56	1
Calcium	26		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 11:56	1
Chromium	0.18		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:56	1
Cobalt	0.044		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:49	1
Iron	160		0.40	0.20	mg/L		11/12/19 15:23	11/13/19 11:56	1
Lead	0.067		0.0075	0.0075	mg/L		11/12/19 15:23	11/13/19 11:56	1
Manganese	0.81		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:49	1
Nickel	0.18		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:49	1
Potassium	22		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 18:49	1
Selenium	<0.050		0.050	0.020	mg/L		11/12/19 15:23	11/13/19 11:56	1
Silver	<0.025		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 11:56	1
Zinc	0.45	J	0.50	0.020	mg/L		11/12/19 15:23	11/13/19 11:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/12/19 15:25	11/20/19 13:14	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		11/12/19 15:23	11/19/19 22:34	1
Thallium	0.0032		0.0020	0.0020	mg/L		11/12/19 15:23	11/19/19 22:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00038		0.00033	0.00033	mg/L		11/13/19 11:15	11/14/19 10:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.020	0.0065	mg/Kg	☼	11/15/19 14:20	11/18/19 07:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.28	mg/Kg	☼	11/20/19 14:10	11/20/19 17:27	1
pH	7.9		0.2	0.2	SU			11/13/19 14:20	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-2

Lab Sample ID: 500-173107-6

Date Collected: 11/06/19 13:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/07/19 18:30	11/16/19 07:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/07/19 18:30	11/16/19 07:17	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/07/19 18:30	11/16/19 07:17	1
Dibromofluoromethane	94		75 - 126	11/07/19 18:30	11/16/19 07:17	1
Toluene-d8 (Surr)	94		75 - 124	11/07/19 18:30	11/16/19 07:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-2

Lab Sample ID: 500-173107-6

Date Collected: 11/06/19 13:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-2

Lab Sample ID: 500-173107-6

Date Collected: 11/06/19 13:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.0

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	☼	11/18/19 16:53	11/21/19 13:39	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/18/19 16:53	11/21/19 13:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		31 - 143				11/18/19 16:53	11/21/19 13:39	1
2-Fluorobiphenyl	93		43 - 145				11/18/19 16:53	11/21/19 13:39	1
2-Fluorophenol	89		31 - 166				11/18/19 16:53	11/21/19 13:39	1
Nitrobenzene-d5	74		37 - 147				11/18/19 16:53	11/21/19 13:39	1
Phenol-d5	75		30 - 153				11/18/19 16:53	11/21/19 13:39	1
Terphenyl-d14	91		42 - 157				11/18/19 16:53	11/21/19 13:39	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.1	0.21	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Arsenic	8.5		0.54	0.18	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Barium	56		0.54	0.061	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Beryllium	0.64		0.22	0.050	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Boron	11		2.7	0.25	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Cadmium	0.12	B	0.11	0.019	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Calcium	72000		110	18	mg/Kg	☼	11/19/19 17:41	11/21/19 12:04	10
Chromium	15	B	0.54	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Cobalt	13		0.27	0.071	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Copper	21		0.54	0.15	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Iron	19000	B	11	5.6	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Lead	14		0.27	0.12	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Magnesium	46000		54	27	mg/Kg	☼	11/19/19 17:41	11/21/19 12:04	10
Manganese	430		0.54	0.078	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Nickel	31		0.54	0.16	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Potassium	2400		27	9.5	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Silver	2.7		0.27	0.069	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Sodium	160		54	8.0	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Thallium	0.99		0.54	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Vanadium	20		0.27	0.064	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	1
Zinc	70		1.1	0.47	mg/Kg	☼	11/19/19 17:41	11/20/19 15:45	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		11/12/19 15:25	11/13/19 19:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/12/19 15:25	11/13/19 19:52	1
Chromium	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:52	1
Iron	<0.40		0.40	0.20	mg/L		11/12/19 15:25	11/13/19 19:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-2

Lab Sample ID: 500-173107-6

Date Collected: 11/06/19 13:05

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.0

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		11/12/19 15:25	11/13/19 19:52	1
Manganese	0.46		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:52	1
Nickel	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.063		0.050	0.010	mg/L		11/12/19 15:23	11/13/19 12:00	1
Barium	0.54		0.50	0.050	mg/L		11/12/19 15:23	11/13/19 18:53	1
Beryllium	0.0058		0.0040	0.0040	mg/L		11/12/19 15:23	11/13/19 12:00	1
Boron	0.20		0.10	0.050	mg/L		11/12/19 15:23	11/13/19 12:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/12/19 15:23	11/13/19 12:00	1
Calcium	31		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 12:00	1
Chromium	0.14		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 12:00	1
Cobalt	0.051		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:53	1
Iron	130		0.40	0.20	mg/L		11/12/19 15:23	11/13/19 12:00	1
Lead	0.043		0.0075	0.0075	mg/L		11/12/19 15:23	11/13/19 12:00	1
Manganese	0.69		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:53	1
Nickel	0.17		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:53	1
Potassium	34		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 18:53	1
Selenium	<0.050		0.050	0.020	mg/L		11/12/19 15:23	11/13/19 12:00	1
Silver	<0.025		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 12:00	1
Zinc	0.37	J	0.50	0.020	mg/L		11/12/19 15:23	11/13/19 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/12/19 15:25	11/20/19 13:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/12/19 15:23	11/19/19 22:38	1
Thallium	0.0032		0.0020	0.0020	mg/L		11/12/19 15:23	11/19/19 22:38	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		11/13/19 11:15	11/14/19 10:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0062	mg/Kg	☼	11/15/19 14:20	11/18/19 07:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	11/20/19 14:10	11/20/19 17:27	1
pH	7.6		0.2	0.2	SU			11/13/19 14:21	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-3

Lab Sample ID: 500-173107-7

Date Collected: 11/06/19 13:10

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Methylene Chloride	0.0018 J		0.0040	0.0016	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/07/19 18:30	11/16/19 07:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/07/19 18:30	11/16/19 07:42	1
4-Bromofluorobenzene (Surr)	96		75 - 131	11/07/19 18:30	11/16/19 07:42	1
Dibromofluoromethane	93		75 - 126	11/07/19 18:30	11/16/19 07:42	1
Toluene-d8 (Surr)	97		75 - 124	11/07/19 18:30	11/16/19 07:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-3

Lab Sample ID: 500-173107-7

Date Collected: 11/06/19 13:10

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Chrysene	0.011	J	0.038	0.011	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-3

Lab Sample ID: 500-173107-7

Date Collected: 11/06/19 13:10

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Phenanthrene	0.018	J	0.038	0.0054	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	11/18/19 16:53	11/21/19 14:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	98		31 - 143				11/18/19 16:53	11/21/19 14:06	1
2-Fluorobiphenyl	80		43 - 145				11/18/19 16:53	11/21/19 14:06	1
2-Fluorophenol	82		31 - 166				11/18/19 16:53	11/21/19 14:06	1
Nitrobenzene-d5	65		37 - 147				11/18/19 16:53	11/21/19 14:06	1
Phenol-d5	70		30 - 153				11/18/19 16:53	11/21/19 14:06	1
Terphenyl-d14	92		42 - 157				11/18/19 16:53	11/21/19 14:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.1	0.21	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Arsenic	6.7		0.54	0.18	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Barium	31		0.54	0.061	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Beryllium	0.58		0.22	0.050	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Boron	11		2.7	0.25	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Cadmium	0.16	B	0.11	0.019	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Calcium	90000		110	18	mg/Kg	☼	11/19/19 17:41	11/21/19 12:08	10
Chromium	13	B	0.54	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Cobalt	11		0.27	0.070	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Copper	19		0.54	0.15	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Iron	16000	B	11	5.6	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Lead	11		0.27	0.12	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Magnesium	52000		54	27	mg/Kg	☼	11/19/19 17:41	11/21/19 12:08	10
Manganese	460		0.54	0.078	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Nickel	23		0.54	0.16	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Potassium	2400		27	9.5	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Silver	2.3		0.27	0.069	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Sodium	180		54	8.0	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Thallium	0.56		0.54	0.27	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Vanadium	18		0.27	0.063	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	1
Zinc	58		1.1	0.47	mg/Kg	☼	11/19/19 17:41	11/20/19 15:49	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		11/12/19 15:25	11/13/19 19:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/12/19 15:25	11/13/19 19:57	1
Chromium	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:57	1
Iron	<0.40		0.40	0.20	mg/L		11/12/19 15:25	11/13/19 19:57	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Client Sample ID: 3222V-20-B12-3

Lab Sample ID: 500-173107-7

Date Collected: 11/06/19 13:10

Matrix: Solid

Date Received: 11/07/19 11:05

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/12/19 15:25	11/13/19 19:57	1
Manganese	0.83		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:57	1
Nickel	<0.025		0.025	0.010	mg/L		11/12/19 15:25	11/13/19 19:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.060		0.050	0.010	mg/L		11/12/19 15:23	11/13/19 12:05	1
Barium	0.47	J	0.50	0.050	mg/L		11/12/19 15:23	11/13/19 18:57	1
Beryllium	0.0064		0.0040	0.0040	mg/L		11/12/19 15:23	11/13/19 12:05	1
Boron	0.22		0.10	0.050	mg/L		11/12/19 15:23	11/13/19 12:05	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L		11/12/19 15:23	11/13/19 12:05	1
Calcium	50		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 12:05	1
Chromium	0.15		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 12:05	1
Cobalt	0.038		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:57	1
Iron	140		0.40	0.20	mg/L		11/12/19 15:23	11/13/19 12:05	1
Lead	0.058		0.0075	0.0075	mg/L		11/12/19 15:23	11/13/19 12:05	1
Manganese	0.62		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:57	1
Nickel	0.16		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 18:57	1
Potassium	41		2.5	0.50	mg/L		11/12/19 15:23	11/13/19 18:57	1
Selenium	<0.050		0.050	0.020	mg/L		11/12/19 15:23	11/13/19 12:05	1
Silver	<0.025		0.025	0.010	mg/L		11/12/19 15:23	11/13/19 12:05	1
Zinc	0.43	J	0.50	0.020	mg/L		11/12/19 15:23	11/13/19 12:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/12/19 15:25	11/20/19 13:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/12/19 15:23	11/19/19 22:42	1
Thallium	0.0028		0.0020	0.0020	mg/L		11/12/19 15:23	11/19/19 22:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020	0.00020	mg/L		11/13/19 11:15	11/14/19 10:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.018	0.0061	mg/Kg	☼	11/15/19 14:20	11/18/19 08:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	11/20/19 14:10	11/20/19 17:28	1
pH	7.5		0.2	0.2	SU			11/13/19 14:22	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-173107-1

Laboratory: Eurofins TestAmerica, Chicago


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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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	 500-173107 COC	Laboratory	Project Name: <u>AE7-29A</u>	COC No.: <u>1</u> of <u>1</u>
		Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: <u>richard.wright@testamericainc.com</u>	Project No.: <u>PTB/WO: 184-006/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>KEVIN MOORE / W. View: 17</u>	Lab Job No.: <u>500-173107</u> Sample Temp: <u>3.3, 4.4, 3.6</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 MAC, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES

Matrix Key:

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES											Comments		
					VOCs	SVOCs	BETX & MTBE	PNAAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids		Waste Characterization	
1	3222V-20-801	11-6-19	1200	S	X	X						X	X	X	X	X		
2	3222V-20-801 Dup	↓	1205	↓	↓	↓						↓	↓	↓	↓	↓		
3	3222V-20-802	↓	1210	↓	↓	↓						↓	↓	↓	↓	↓		
4	3222V-20-803	↓	1220	↓	↓	↓						↓	↓	↓	↓	↓		
5	3222V-20-812-1	↓	1300	↓	↓	↓						↓	↓	↓	↓	↓		
6	3222V-20-812-2	↓	1305	↓	↓	↓						↓	↓	↓	↓	↓		
7	3222V-20-812-3	↓	1310	↓	↓	↓						↓	↓	↓	↓	↓		

Relinquished by: 	Date/Time: <u>11/6/19 6:00pm</u>	Received by: 	Date/Time: <u>11/6/19 6:00pm</u>
Relinquished by: 	Date/Time: <u>11/7/19 09:10</u>	Received by: 	Date/Time: <u>11/7/19 09:10</u>
Relinquished by: 	Date/Time: <u>11/7/19 11:05</u>	Received by: 	Date/Time: <u>11/7/19 11:05</u>



ANALYTICAL REPORT

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

Laboratory Job ID: 500-172986-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/21/2019 5:31:03 PM

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

LINKS

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www.testamericainc.com

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B05

Lab Sample ID: 500-172986-2

Date Collected: 11/05/19 11:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Acetone	0.021		0.016	0.0068	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/06/19 19:45	11/15/19 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/06/19 19:45	11/15/19 15:46	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/06/19 19:45	11/15/19 15:46	1
Dibromofluoromethane	93		75 - 126	11/06/19 19:45	11/15/19 15:46	1
Toluene-d8 (Surr)	98		75 - 124	11/06/19 19:45	11/15/19 15:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B05

Lab Sample ID: 500-172986-2

Date Collected: 11/05/19 11:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Acenaphthylene	0.023	J	0.038	0.0051	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Anthracene	0.012	J	0.038	0.0065	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Benzo[a]anthracene	0.018	J	0.038	0.0052	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Benzo[a]pyrene	0.026	J	0.038	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Benzo[b]fluoranthene	0.043		0.038	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Benzo[g,h,i]perylene	0.035	J	0.038	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Chrysene	0.027	J	0.038	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Fluoranthene	0.027	J	0.038	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B05

Lab Sample ID: 500-172986-2

Date Collected: 11/05/19 11:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.022	J	0.038	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Phenanthrene	0.018	J	0.038	0.0054	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Pyrene	0.033	J	0.038	0.0077	mg/Kg	☼	11/16/19 18:01	11/19/19 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		31 - 143				11/16/19 18:01	11/19/19 17:08	1
2-Fluorobiphenyl	83		43 - 145				11/16/19 18:01	11/19/19 17:08	1
2-Fluorophenol	63		31 - 166				11/16/19 18:01	11/19/19 17:08	1
Nitrobenzene-d5	65		37 - 147				11/16/19 18:01	11/19/19 17:08	1
Phenol-d5	67		30 - 153				11/16/19 18:01	11/19/19 17:08	1
Terphenyl-d14	100		42 - 157				11/16/19 18:01	11/19/19 17:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44	J	1.2	0.23	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Arsenic	8.6		0.58	0.20	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Barium	62		0.58	0.066	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Beryllium	0.60		0.23	0.054	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Boron	12		2.9	0.27	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Cadmium	0.24		0.12	0.021	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Calcium	59000	B	120	20	mg/Kg	☼	11/18/19 09:22	11/19/19 12:50	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Cobalt	14		0.29	0.076	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Copper	20		0.58	0.16	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Iron	28000	B	12	6.0	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Lead	24		0.29	0.13	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Magnesium	28000		5.8	2.9	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Manganese	590		0.58	0.084	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Nickel	29	B	0.58	0.17	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Potassium	2500		29	10	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Selenium	1.0		0.58	0.34	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Silver	3.1		0.29	0.075	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Sodium	650		58	8.6	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Vanadium	22		0.29	0.068	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1
Zinc	69		1.2	0.51	mg/Kg	☼	11/18/19 09:22	11/18/19 19:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 20:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 20:50	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B05

Lab Sample ID: 500-172986-2

Date Collected: 11/05/19 11:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:14	1
Barium	0.10	J	0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:14	1
Boron	0.054	J	0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:14	1
Calcium	16		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:14	1
Chromium	0.017	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:14	1
Cobalt	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:14	1
Iron	17		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:14	1
Lead	0.016		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:14	1
Manganese	0.13		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:14	1
Nickel	0.020	J ^	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:14	1
Potassium	5.0		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:14	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:14	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:14	1
Zinc	0.072	J	0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:14	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		11/08/19 15:37	11/14/19 16:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 16:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.018	0.0061	mg/Kg	☼	11/14/19 15:30	11/15/19 09:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	11/19/19 13:10	11/19/19 16:11	1
pH	8.2		0.2	0.2	SU			11/08/19 16:12	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B06

Lab Sample ID: 500-172986-3

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

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	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
1,1-Dichloroethene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
2-Butanone (MEK)	0.011		0.0048	0.0022	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Acetone	0.065		0.019	0.0084	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Bromoform	<0.0019		0.0019	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Chlorobenzene	<0.0019		0.0019	0.00072	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Chloroethane	<0.0048 *		0.0048	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Ethylbenzene	<0.0019		0.0019	0.00093	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Methylene Chloride	0.0030 J		0.0048	0.0019	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Styrene	<0.0019		0.0019	0.00059	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Trichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Vinyl chloride	<0.0019		0.0019	0.00086	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1
Xylenes, Total	0.0010 J		0.0039	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/06/19 19:45	11/15/19 16:12	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/06/19 19:45	11/15/19 16:12	1
Dibromofluoromethane	95		75 - 126	11/06/19 19:45	11/15/19 16:12	1
Toluene-d8 (Surr)	99		75 - 124	11/06/19 19:45	11/15/19 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	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B06

Lab Sample ID: 500-172986-3

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

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	<0.41		0.41	0.095	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2-Methylnaphthalene	0.041	J	0.084	0.0077	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Acenaphthene	0.019	J	0.041	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Anthracene	0.027	J	0.041	0.0070	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Benzo[a]anthracene	0.12		0.041	0.0056	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Benzo[a]pyrene	0.16		0.041	0.0081	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Benzo[b]fluoranthene	0.28		0.041	0.0090	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Benzo[g,h,i]perylene	0.070		0.041	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Benzo[k]fluoranthene	0.12		0.041	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Chrysene	0.20		0.041	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Dibenz(a,h)anthracene	0.023	J	0.041	0.0081	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Fluoranthene	0.31		0.041	0.0077	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Fluorene	0.031	J	0.041	0.0059	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B06

Lab Sample ID: 500-172986-3

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

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	0.080		0.041	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Phenanthrene	0.18		0.041	0.0058	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Pyrene	0.28		0.041	0.0083	mg/Kg	☼	11/16/19 18:01	11/19/19 18:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		31 - 143				11/16/19 18:01	11/19/19 18:43	1
2-Fluorobiphenyl	91		43 - 145				11/16/19 18:01	11/19/19 18:43	1
2-Fluorophenol	64		31 - 166				11/16/19 18:01	11/19/19 18:43	1
Nitrobenzene-d5	71		37 - 147				11/16/19 18:01	11/19/19 18:43	1
Phenol-d5	73		30 - 153				11/16/19 18:01	11/19/19 18:43	1
Terphenyl-d14	93		42 - 157				11/16/19 18:01	11/19/19 18:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.2	0.22	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Arsenic	7.1		0.58	0.20	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Barium	100		0.58	0.066	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Beryllium	0.67		0.23	0.054	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Boron	10		2.9	0.27	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Cadmium	0.42		0.12	0.021	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Calcium	41000	B	120	20	mg/Kg	☼	11/18/19 09:22	11/19/19 14:12	10
Chromium	18	B	0.58	0.29	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Cobalt	9.6		0.29	0.076	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Copper	22		0.58	0.16	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Iron	18000	B	12	6.0	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Lead	65		0.29	0.13	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Magnesium	22000		5.8	2.9	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Manganese	340		0.58	0.084	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Nickel	24	B	0.58	0.17	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Potassium	2000		29	10	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Selenium	1.2		0.58	0.34	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Silver	3.5		0.29	0.074	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Sodium	1100		58	8.5	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Thallium	0.94		0.58	0.29	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Vanadium	27		0.29	0.068	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	1
Zinc	110		1.2	0.51	mg/Kg	☼	11/18/19 09:22	11/18/19 19:28	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		11/14/19 15:55	11/15/19 20:55	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 20:55	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 20:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 20:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B06

Lab Sample ID: 500-172986-3

Date Collected: 11/05/19 12:10

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	7.6		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 20:55	1
Nickel	0.020	J	0.025	0.010	mg/L		11/14/19 15:55	11/15/19 20:55	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		11/08/19 15:37	11/12/19 14:18	1
Barium	0.68		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:18	1
Beryllium	0.0057		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:18	1
Boron	0.14		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:18	1
Calcium	30		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:18	1
Chromium	0.13		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:18	1
Cobalt	0.046		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:18	1
Iron	130		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:18	1
Lead	0.24		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:18	1
Manganese	1.1		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:18	1
Nickel	0.12	^	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:18	1
Potassium	21		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:18	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:18	1
Silver	0.011	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:18	1
Zinc	0.46	J	0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:18	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		11/08/19 15:37	11/14/19 16:33	1
Thallium	0.0020		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 16:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.020	0.0065	mg/Kg	☼	11/14/19 15:30	11/15/19 09:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.42		0.42	0.21	mg/Kg	☼	11/19/19 13:10	11/19/19 16:11	1
pH	8.2		0.2	0.2	SU			11/08/19 16:15	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B07

Lab Sample ID: 500-172986-4

Date Collected: 11/05/19 12:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/06/19 19:45	11/15/19 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/06/19 19:45	11/15/19 16:37	1
4-Bromofluorobenzene (Surr)	90		75 - 131	11/06/19 19:45	11/15/19 16:37	1
Dibromofluoromethane	100		75 - 126	11/06/19 19:45	11/15/19 16:37	1
Toluene-d8 (Surr)	91		75 - 124	11/06/19 19:45	11/15/19 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B07

Lab Sample ID: 500-172986-4

Date Collected: 11/05/19 12:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Benzo[a]anthracene	0.0096	J	0.039	0.0053	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Benzo[a]pyrene	0.011	J	0.039	0.0076	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Benzo[b]fluoranthene	0.017	J	0.039	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Chrysene	0.012	J	0.039	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Fluoranthene	0.014	J	0.039	0.0073	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B07

Lab Sample ID: 500-172986-4

Date Collected: 11/05/19 12:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1
Pyrene	0.012	J	0.039	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 15:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		31 - 143	11/16/19 18:01	11/19/19 15:32	1
2-Fluorobiphenyl	83		43 - 145	11/16/19 18:01	11/19/19 15:32	1
2-Fluorophenol	59		31 - 166	11/16/19 18:01	11/19/19 15:32	1
Nitrobenzene-d5	67		37 - 147	11/16/19 18:01	11/19/19 15:32	1
Phenol-d5	58		30 - 153	11/16/19 18:01	11/19/19 15:32	1
Terphenyl-d14	102		42 - 157	11/16/19 18:01	11/19/19 15:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J	1.1	0.21	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Arsenic	8.6		0.55	0.19	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Barium	70		0.55	0.063	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Beryllium	0.73		0.22	0.051	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Boron	12		2.8	0.26	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Cadmium	0.36		0.11	0.020	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Calcium	43000	B	110	19	mg/Kg	☼	11/18/19 09:22	11/19/19 14:16	10
Chromium	18	B	0.55	0.27	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Cobalt	14		0.28	0.072	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Copper	23		0.55	0.15	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Iron	23000	B	11	5.7	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Lead	30		0.28	0.13	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Magnesium	22000		5.5	2.7	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Manganese	470		0.55	0.080	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Nickel	31	B	0.55	0.16	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Potassium	2700		28	9.7	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Selenium	0.95		0.55	0.32	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Silver	3.6		0.28	0.071	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Sodium	140		55	8.1	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Thallium	1.2		0.55	0.27	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Vanadium	25		0.28	0.065	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	1
Zinc	120		1.1	0.48	mg/Kg	☼	11/18/19 09:22	11/18/19 19:32	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		11/14/19 15:55	11/15/19 20:59	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 20:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 20:59	1
Manganese	0.037		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 20:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B07

Lab Sample ID: 500-172986-4

Date Collected: 11/05/19 12:20

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.048	J	0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:22	1
Barium	0.35	J	0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:22	1
Beryllium	0.0045		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:22	1
Boron	0.11		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:22	1
Calcium	24		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:22	1
Chromium	0.088		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:22	1
Cobalt	0.027		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:22	1
Iron	110		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:22	1
Lead	0.067		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:22	1
Manganese	0.48		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:22	1
Nickel	0.12	^	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:22	1
Potassium	18		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:22	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:22	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:22	1
Zinc	0.37	J	0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:22	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		11/14/19 15:55	11/19/19 03:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 16:37	1
Thallium	0.0024		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0064	mg/Kg	☼	11/14/19 15:30	11/15/19 09:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	11/19/19 13:10	11/19/19 16:12	1
pH	7.9		0.2	0.2	SU			11/08/19 16:19	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B08

Lab Sample ID: 500-172986-5

Date Collected: 11/05/19 10:35

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Chloroethane	<0.0042 *		0.0042	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/06/19 19:45	11/15/19 17:02	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/06/19 19:45	11/15/19 17:02	1
Dibromofluoromethane	94		75 - 126	11/06/19 19:45	11/15/19 17:02	1
Toluene-d8 (Surr)	98		75 - 124	11/06/19 19:45	11/15/19 17:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B08

Lab Sample ID: 500-172986-5

Date Collected: 11/05/19 10:35

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2-Methylnaphthalene	<0.078		0.078	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Benzo[b]fluoranthene	0.013	J	0.039	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Fluoranthene	0.012	J	0.039	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B08

Lab Sample ID: 500-172986-5

Date Collected: 11/05/19 10:35

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1
Pyrene	0.011	J	0.039	0.0077	mg/Kg	☼	11/16/19 18:01	11/19/19 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		31 - 143	11/16/19 18:01	11/19/19 15:56	1
2-Fluorobiphenyl	72		43 - 145	11/16/19 18:01	11/19/19 15:56	1
2-Fluorophenol	53		31 - 166	11/16/19 18:01	11/19/19 15:56	1
Nitrobenzene-d5	55		37 - 147	11/16/19 18:01	11/19/19 15:56	1
Phenol-d5	57		30 - 153	11/16/19 18:01	11/19/19 15:56	1
Terphenyl-d14	101		42 - 157	11/16/19 18:01	11/19/19 15:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.53	J	1.2	0.23	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Arsenic	7.8		0.58	0.20	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Barium	52		0.58	0.066	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Beryllium	0.67		0.23	0.054	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Boron	12		2.9	0.27	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Cadmium	0.18		0.12	0.021	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Calcium	61000	B	120	20	mg/Kg	☼	11/18/19 09:22	11/19/19 14:20	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Cobalt	12		0.29	0.076	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Copper	20		0.58	0.16	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Iron	21000	B	12	6.1	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Lead	14		0.29	0.13	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Magnesium	30000		5.8	2.9	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Manganese	420		0.58	0.084	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Nickel	29	B	0.58	0.17	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Potassium	2900		29	10	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Selenium	0.81		0.58	0.34	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Silver	3.0		0.29	0.075	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Sodium	640		58	8.6	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Vanadium	22		0.29	0.069	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1
Zinc	65		1.2	0.51	mg/Kg	☼	11/18/19 09:22	11/18/19 19:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/14/19 15:55	11/15/19 21:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 21:03	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:03	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B08

Lab Sample ID: 500-172986-5

Date Collected: 11/05/19 10:35

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:03	1
Manganese	0.88		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:03	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.095		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:26	1
Barium	0.60		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:26	1
Beryllium	0.0088		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:26	1
Boron	0.20		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:26	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:26	1
Calcium	54		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:26	1
Chromium	0.18		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:26	1
Cobalt	0.060		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:26	1
Iron	220		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:26	1
Lead	0.12		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:26	1
Manganese	0.93		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:26	1
Nickel	0.25 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:26	1
Potassium	36		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:26	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:26	1
Silver	0.018 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:26	1
Zinc	0.75		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:55	11/19/19 04:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 16:53	1
Thallium	0.0035		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 16:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00023		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014 J		0.019	0.0064	mg/Kg	☼	11/14/19 15:30	11/15/19 09:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	11/19/19 13:10	11/19/19 16:12	1
pH	8.4		0.2	0.2	SU			11/08/19 16:22	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B09

Lab Sample ID: 500-172986-6

Date Collected: 11/05/19 10:50

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1
Xylenes, Total	<0.0032		0.0032	0.00050	mg/Kg	☼	11/06/19 19:45	11/15/19 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/06/19 19:45	11/15/19 17:27	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/06/19 19:45	11/15/19 17:27	1
Dibromofluoromethane	90		75 - 126	11/06/19 19:45	11/15/19 17:27	1
Toluene-d8 (Surr)	96		75 - 124	11/06/19 19:45	11/15/19 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B09

Lab Sample ID: 500-172986-6

Date Collected: 11/05/19 10:50

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Benzo[a]anthracene	0.017	J	0.040	0.0055	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Benzo[a]pyrene	0.019	J	0.040	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Benzo[b]fluoranthene	0.035	J	0.040	0.0087	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Chrysene	0.023	J	0.040	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Fluoranthene	0.037	J	0.040	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B09

Lab Sample ID: 500-172986-6

Date Collected: 11/05/19 10:50

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.011	J	0.040	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Phenanthrene	0.020	J	0.040	0.0056	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Pyrene	0.030	J	0.040	0.0080	mg/Kg	☼	11/16/19 18:01	11/19/19 16:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	62		31 - 143				11/16/19 18:01	11/19/19 16:20	1
2-Fluorobiphenyl	81		43 - 145				11/16/19 18:01	11/19/19 16:20	1
2-Fluorophenol	60		31 - 166				11/16/19 18:01	11/19/19 16:20	1
Nitrobenzene-d5	65		37 - 147				11/16/19 18:01	11/19/19 16:20	1
Phenol-d5	54		30 - 153				11/16/19 18:01	11/19/19 16:20	1
Terphenyl-d14	99		42 - 157				11/16/19 18:01	11/19/19 16:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44	J	1.1	0.22	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Arsenic	7.5		0.57	0.19	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Barium	45		0.57	0.064	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Beryllium	0.67		0.23	0.053	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Boron	15		2.8	0.26	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Cadmium	0.20		0.11	0.020	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Calcium	68000	B	110	19	mg/Kg	☼	11/18/19 09:22	11/19/19 14:25	10
Chromium	17	B	0.57	0.28	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Cobalt	13		0.28	0.074	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Copper	21		0.57	0.16	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Iron	20000	B	11	5.9	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Lead	18		0.28	0.13	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Magnesium	32000		5.7	2.8	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Manganese	450		0.57	0.082	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Nickel	30	B	0.57	0.16	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Potassium	3200		28	10	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Selenium	0.67		0.57	0.33	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Silver	2.9		0.28	0.073	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Sodium	340		57	8.4	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Thallium	0.94		0.57	0.28	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Vanadium	22		0.28	0.067	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1
Zinc	65		1.1	0.50	mg/Kg	☼	11/18/19 09:22	11/18/19 19:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/14/19 15:55	11/15/19 21:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 21:08	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:08	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B09

Lab Sample ID: 500-172986-6

Date Collected: 11/05/19 10:50

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:08	1
Manganese	0.39		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:08	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.10		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:38	1
Barium	0.56		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:38	1
Beryllium	0.0084		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:38	1
Boron	0.22		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:38	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:38	1
Calcium	52		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:38	1
Chromium	0.18		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:38	1
Cobalt	0.058		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:38	1
Iron	220		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:38	1
Lead	0.13		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:38	1
Manganese	0.98		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:38	1
Nickel	0.23 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:38	1
Potassium	40		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:38	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:38	1
Silver	0.018 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:38	1
Zinc	0.71		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:38	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		11/14/19 15:55	11/19/19 04:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 16:57	1
Thallium	0.0040		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 16:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00033		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012 J		0.019	0.0064	mg/Kg	☼	11/14/19 15:30	11/15/19 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.23	mg/Kg	☼	11/19/19 13:10	11/19/19 16:12	1
pH	8.6		0.2	0.2	SU			11/08/19 16:26	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B10

Lab Sample ID: 500-172986-7

Date Collected: 11/05/19 10:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Chloroethane	<0.0045 *		0.0045	0.0013	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 17:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/06/19 19:45	11/15/19 17:53	1
4-Bromofluorobenzene (Surr)	93		75 - 131	11/06/19 19:45	11/15/19 17:53	1
Dibromofluoromethane	94		75 - 126	11/06/19 19:45	11/15/19 17:53	1
Toluene-d8 (Surr)	97		75 - 124	11/06/19 19:45	11/15/19 17:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B10

Lab Sample ID: 500-172986-7

Date Collected: 11/05/19 10:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B10

Lab Sample ID: 500-172986-7

Date Collected: 11/05/19 10:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/16/19 18:01	11/19/19 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		31 - 143				11/16/19 18:01	11/19/19 14:20	1
2-Fluorobiphenyl	67		43 - 145				11/16/19 18:01	11/19/19 14:20	1
2-Fluorophenol	50		31 - 166				11/16/19 18:01	11/19/19 14:20	1
Nitrobenzene-d5	54		37 - 147				11/16/19 18:01	11/19/19 14:20	1
Phenol-d5	50		30 - 153				11/16/19 18:01	11/19/19 14:20	1
Terphenyl-d14	100		42 - 157				11/16/19 18:01	11/19/19 14:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.67	J	1.2	0.23	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Arsenic	12		0.60	0.20	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Barium	89		0.60	0.068	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Beryllium	0.93		0.24	0.056	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Boron	13		3.0	0.28	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Cadmium	0.19		0.12	0.022	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Calcium	15000	B	12	2.0	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Chromium	22	B	0.60	0.30	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Cobalt	16		0.30	0.078	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Copper	29		0.60	0.17	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Iron	29000	B	12	6.2	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Lead	20		0.30	0.14	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Magnesium	13000		6.0	3.0	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Manganese	490		0.60	0.087	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Nickel	47	B	0.60	0.17	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Potassium	3400		30	11	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Selenium	1.0		0.60	0.35	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Silver	4.5		0.30	0.077	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Sodium	440		60	8.9	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Thallium	1.4		0.60	0.30	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Vanadium	30		0.30	0.071	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1
Zinc	100		1.2	0.53	mg/Kg	☼	11/18/19 09:22	11/18/19 19:56	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/14/19 15:55	11/15/19 21:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 21:21	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:21	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B10

Lab Sample ID: 500-172986-7

Date Collected: 11/05/19 10:55

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 80.5

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		11/14/19 15:55	11/15/19 21:21	1
Manganese	0.18		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:21	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.11		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:42	1
Barium	0.95		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:42	1
Beryllium	0.010		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:42	1
Boron	0.21		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:42	1
Calcium	29		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:42	1
Chromium	0.22		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:42	1
Cobalt	0.086		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:42	1
Iron	280		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:42	1
Lead	0.11		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:42	1
Manganese	1.2		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:42	1
Nickel	0.33 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:42	1
Potassium	40		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:42	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:42	1
Silver	0.024 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:42	1
Zinc	0.88		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:42	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		11/14/19 15:55	11/19/19 04:08	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		11/08/19 15:37	11/14/19 17:00	1
Thallium	0.0057		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00032		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.019	0.0064	mg/Kg	☼	11/14/19 15:30	11/15/19 09:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.28	mg/Kg	☼	11/19/19 13:10	11/19/19 16:13	1
pH	7.6		0.2	0.2	SU			11/08/19 16:29	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11

Lab Sample ID: 500-172986-9

Date Collected: 11/05/19 11:05

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/06/19 19:45	11/15/19 18:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/06/19 19:45	11/15/19 18:18	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/06/19 19:45	11/15/19 18:18	1
Dibromofluoromethane	99		75 - 126	11/06/19 19:45	11/15/19 18:18	1
Toluene-d8 (Surr)	95		75 - 124	11/06/19 19:45	11/15/19 18:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
1,4-Dichlorobenzene	<0.21		0.21	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11

Lab Sample ID: 500-172986-9

Date Collected: 11/05/19 11:05

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2,4-Dinitrophenol	<0.86		0.86	0.75	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2,4-Dinitrotoluene	<0.21		0.21	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2,6-Dinitrotoluene	<0.21		0.21	0.084	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2-Chlorophenol	<0.21		0.21	0.073	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2-Methylnaphthalene	<0.086		0.086	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
4,6-Dinitro-2-methylphenol	<0.86		0.86	0.34	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
4-Nitrophenol	<0.86		0.86	0.40	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Benzo[b]fluoranthene	<0.042		0.042	0.0092	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Benzo[k]fluoranthene	<0.042		0.042	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.064	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Chrysene	<0.042		0.042	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Dimethyl phthalate	<0.21		0.21	0.056	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Fluoranthene	<0.042		0.042	0.0079	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Hexachlorobenzene	<0.086		0.086	0.0099	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Hexachlorocyclopentadiene	<0.86		0.86	0.24	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Hexachloroethane	<0.21		0.21	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11

Lab Sample ID: 500-172986-9

Date Collected: 11/05/19 11:05

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 77.9

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	<0.042		0.042	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Pentachlorophenol	<0.86		0.86	0.68	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Pyrene	<0.042		0.042	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 14:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		31 - 143				11/16/19 18:01	11/19/19 14:44	1
2-Fluorobiphenyl	65		43 - 145				11/16/19 18:01	11/19/19 14:44	1
2-Fluorophenol	51		31 - 166				11/16/19 18:01	11/19/19 14:44	1
Nitrobenzene-d5	55		37 - 147				11/16/19 18:01	11/19/19 14:44	1
Phenol-d5	51		30 - 153				11/16/19 18:01	11/19/19 14:44	1
Terphenyl-d14	91		42 - 157				11/16/19 18:01	11/19/19 14:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.2	0.24	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Arsenic	6.6		0.61	0.21	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Barium	100		0.61	0.069	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Beryllium	0.56		0.24	0.057	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Boron	3.2		3.0	0.28	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Cadmium	0.069	J	0.12	0.022	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Calcium	2400	B	12	2.1	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Chromium	14	B	0.61	0.30	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Cobalt	9.8		0.30	0.079	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Copper	13		0.61	0.17	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Iron	17000	B	12	6.3	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Lead	17		0.30	0.14	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Magnesium	2300		6.1	3.0	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Manganese	600		0.61	0.088	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Nickel	18	B	0.61	0.18	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Potassium	1200		30	11	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Selenium	0.99		0.61	0.36	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Silver	4.4		0.30	0.078	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Sodium	250		61	9.0	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Thallium	1.0		0.61	0.30	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Vanadium	26		0.30	0.072	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	1
Zinc	52		1.2	0.53	mg/Kg	☼	11/18/19 09:22	11/18/19 20:00	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		11/14/19 15:55	11/15/19 21:25	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:25	1
Iron	0.24	J	0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:25	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11

Lab Sample ID: 500-172986-9

Date Collected: 11/05/19 11:05

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.058		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:25	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.041	J	0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:46	1
Barium	0.63		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:46	1
Beryllium	0.0050		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:46	1
Boron	0.063	J	0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:46	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:46	1
Calcium	17		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:46	1
Chromium	0.12		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:46	1
Cobalt	0.020	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:46	1
Iron	130		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:46	1
Lead	0.054		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:46	1
Manganese	0.49		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:46	1
Nickel	0.12		0.025	0.010	mg/L		11/08/19 15:37	11/13/19 20:21	1
Potassium	13		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:46	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:46	1
Silver	0.011	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:46	1
Zinc	0.38	J	0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:46	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		11/14/19 15:55	11/19/19 04:12	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		11/08/19 15:37	11/14/19 17:04	1
Thallium	0.0026		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00025		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.020	0.0067	mg/Kg	☼	11/14/19 15:30	11/15/19 09:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.26	mg/Kg	☼	11/19/19 13:10	11/19/19 16:13	1
pH	7.3		0.2	0.2	SU			11/08/19 16:33	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11 Dup

Lab Sample ID: 500-172986-10

Date Collected: 11/05/19 11:10

Matrix: Solid

Date Received: 11/06/19 11:00

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	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Chloroethane	<0.0047 *		0.0047	0.0014	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/06/19 19:45	11/15/19 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/06/19 19:45	11/15/19 18:43	1
4-Bromofluorobenzene (Surr)	91		75 - 131	11/06/19 19:45	11/15/19 18:43	1
Dibromofluoromethane	92		75 - 126	11/06/19 19:45	11/15/19 18:43	1
Toluene-d8 (Surr)	96		75 - 124	11/06/19 19:45	11/15/19 18:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.22		0.22	0.047	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
1,4-Dichlorobenzene	<0.22		0.22	0.055	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11 Dup

Lab Sample ID: 500-172986-10

Date Collected: 11/05/19 11:10

Matrix: Solid

Date Received: 11/06/19 11:00

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	<0.43		0.43	0.099	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2,4-Dinitrophenol	<0.87		0.87	0.76	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2,4-Dinitrotoluene	<0.22		0.22	0.069	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2,6-Dinitrotoluene	<0.22		0.22	0.085	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2-Chlorophenol	<0.22		0.22	0.074	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2-Methylnaphthalene	<0.087		0.087	0.0080	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
3 & 4 Methylphenol	<0.22		0.22	0.072	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.061	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
4,6-Dinitro-2-methylphenol	<0.87		0.87	0.35	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
4-Chloroaniline	<0.87		0.87	0.20	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.050	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
4-Nitrophenol	<0.87		0.87	0.41	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Acenaphthene	<0.043		0.043	0.0078	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Acenaphthylene	<0.043		0.043	0.0057	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Anthracene	<0.043		0.043	0.0072	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Benzo[a]anthracene	<0.043		0.043	0.0058	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Benzo[a]pyrene	<0.043		0.043	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Benzo[b]fluoranthene	<0.043		0.043	0.0093	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.065	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.079	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Chrysene	<0.043		0.043	0.012	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0084	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Dimethyl phthalate	<0.22		0.22	0.056	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Di-n-octyl phthalate	<0.22		0.22	0.071	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Fluoranthene	<0.043		0.043	0.0080	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Fluorene	<0.043		0.043	0.0061	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Hexachlorobenzene	<0.087		0.087	0.010	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Hexachlorocyclopentadiene	<0.87		0.87	0.25	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Hexachloroethane	<0.22		0.22	0.066	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11 Dup

Lab Sample ID: 500-172986-10

Date Collected: 11/05/19 11:10

Matrix: Solid

Date Received: 11/06/19 11:00

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	<0.043		0.043	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Isophorone	<0.22		0.22	0.049	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Naphthalene	<0.043		0.043	0.0067	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
N-Nitrosodi-n-propylamine	<0.087		0.087	0.053	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Pentachlorophenol	<0.87		0.87	0.69	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Phenanthrene	<0.043		0.043	0.0060	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Phenol	<0.22		0.22	0.096	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Pyrene	<0.043		0.043	0.0086	mg/Kg	☼	11/16/19 18:01	11/19/19 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		31 - 143				11/16/19 18:01	11/19/19 15:08	1
2-Fluorobiphenyl	75		43 - 145				11/16/19 18:01	11/19/19 15:08	1
2-Fluorophenol	57		31 - 166				11/16/19 18:01	11/19/19 15:08	1
Nitrobenzene-d5	64		37 - 147				11/16/19 18:01	11/19/19 15:08	1
Phenol-d5	59		30 - 153				11/16/19 18:01	11/19/19 15:08	1
Terphenyl-d14	102		42 - 157				11/16/19 18:01	11/19/19 15:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.2	0.24	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Arsenic	6.7		0.62	0.21	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Barium	110		0.62	0.071	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Beryllium	0.62		0.25	0.058	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Boron	3.5		3.1	0.29	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Cadmium	0.091	J	0.12	0.022	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Calcium	2700	B	12	2.1	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Chromium	14	B	0.62	0.31	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Cobalt	9.2		0.31	0.082	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Copper	13		0.62	0.17	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Iron	17000	B	12	6.5	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Lead	15		0.31	0.14	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Magnesium	2200		6.2	3.1	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Manganese	740		0.62	0.090	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Nickel	19	B	0.62	0.18	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Potassium	1300		31	11	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Selenium	1.2		0.62	0.37	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Silver	4.6		0.31	0.080	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Sodium	260		62	9.2	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Thallium	1.1		0.62	0.31	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Vanadium	25		0.31	0.073	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	1
Zinc	54		1.2	0.55	mg/Kg	☼	11/18/19 09:22	11/18/19 20:04	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		11/14/19 15:55	11/15/19 21:29	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:29	1
Iron	0.51		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Client Sample ID: 3222V-20-B11 Dup

Lab Sample ID: 500-172986-10

Date Collected: 11/05/19 11:10

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.026		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:29	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.040	J	0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:50	1
Barium	0.72		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:50	1
Beryllium	0.0052		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:50	1
Boron	0.070	J	0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:50	1
Calcium	19		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:50	1
Chromium	0.13		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:50	1
Cobalt	0.021	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:50	1
Iron	130		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:50	1
Lead	0.048		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:50	1
Manganese	0.61		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:50	1
Nickel	0.11	^	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:50	1
Potassium	14		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:50	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:50	1
Silver	0.013	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:50	1
Zinc	0.44	J	0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:50	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		11/14/19 15:55	11/19/19 04:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/08/19 15:37	11/14/19 17:08	1
Thallium	0.0022		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.021	0.0069	mg/Kg	☼	11/14/19 15:30	11/15/19 09:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	11/19/19 13:10	11/19/19 16:14	1
pH	7.3		0.2	0.2	SU			11/08/19 16:36	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
 Project/Site: IDOT - AE7-029

Job ID: 500-172986-1

Laboratory: Eurofins TestAmerica, Chicago

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


Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

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 500-172986 COC Contact: Colleen Grey email: cgrey@andrews-eng.com		Laboratory Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>AE7-29A</u> Project No.: <u>PTB/WO:184-C06/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD Other Sampler: <u>K. Moore / W. Newich</u>	COC No.: <u>1</u> of <u>2</u> Lab Job No.: <u>500-172986</u> Sample Temp: <u>56, 29, 24</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits.
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.
 *** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES											
VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
	3822V-20-1301			S	X	X					X	X	X	X	X		
	3822V-20-1301																
	3822V-20-1302																
	3822V-20-1303																
1	3822V-20-1304	11-5-19	1145														
2	3822V-20-1305		1155														
3	3822V-20-1306		1210														
4	3822V-20-1307		1220														
5	3822V-20-1308	11-5-19	1035														
6	3822V-20-1309		1050														
7	3822V-20-1310		1055														
8	Top Blank #2				X												

Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/5/19 5:00PM</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 5:00PM</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/6/19 9:05am</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 09:05</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/6/19 11:00</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 11:00</u>



CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name: <u>ACT-29A</u>	COC No.: <u>2 of 2</u>
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>PT13/WO:184-006/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other	Lab Job No.: <u>500-172986</u> Sample Temp: <u>56/29, 24</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 MAC, run ASTM D3987 (Neutral Leach) cyanide.		Analyses	Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES											Comments	
					VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids		Waste Characterization
9	3222V-20-B11	11-5-19	1105	S	X	X					X	X	X	X	X		
10-2	3222V-20-B11 DUW	11-5-19	1110	S	↓	↓					↓	↓	↓	↓	↓		
	3222V-20-B11-1				↓	↓					↓	↓	↓	↓	↓		
	3222V-20-B12-2				↓	↓					↓	↓	↓	↓	↓		
	3222V-20-B12-3				↓	↓					↓	↓	↓	↓	↓		

Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/5/19 5:00PM</u>	Received by: <u>Anestha Balakrishnan</u>	Date/Time: <u>11/5/19 5:00PM</u>
Relinquished by: <u>Anestha Balakrishnan</u>	Date/Time: <u>11/6/19 9:05am</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 0905</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/6/19 11:00</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/6/19 11:00</u>



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: FAP 338 (IL 59) Office Phone Number, if available: _____

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

901-951 West Bartlett Road

City: Bartlett State: IL Zip Code: 60103

County: Cook Township: Hanover

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

Latitude: 41.99455 Longitude: -88.20363
(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: 0314125039 BOW: _____ BOA: _____

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

Estimated Volume of debris (cu. Yd.): 128

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 3222V-21-B01 AND 3222V-21-B02 WERE SAMPLED ADJACENT TO SITE 3222V-21. SEE TABLE 3h AND FIGURE 3 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]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBER: 500-172988-1.

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

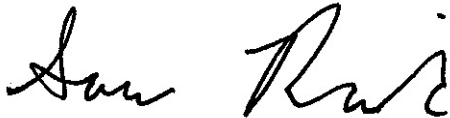
I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the 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:

Jan 12, 2022

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

ISGS Site 3222V-21

Maryville Academy Eisenberg Campus

Sample ID	3222V-21-B01	3222V-21-B02	Maximum Allowable Concentration						
Sample Depth (ft)	0-3	0-3	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area		
Sample Date	11/5/2019	11/5/2019							
PID	0	0							
Sample pH	7.9	7.9							
Matrix	Soil	Soil							
Semivolatile Organic Compounds (mg/kg)									
Benzo(a)pyrene	0.18	1,2	0.41	1,2	0.09	0.09	0.98	1.3	2.1
Benzo(b)fluoranthene	0.26		1.5	1,2,3	0.9	0.9	0.9	1.5	2.1
Dibenzo(a,h)anthracene	J 0.026		0.096	1,2	0.09	0.09	0.15	0.2	0.42

ANALYTICAL REPORT

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

Laboratory Job ID: 500-172988-1
Client Project/Site: IDOT - AE7-029

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
11/20/2019 4:03:23 PM

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

LINKS

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results through
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www.testamericainc.com

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

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B01

Lab Sample ID: 500-172988-1

Date Collected: 11/05/19 12:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Chloroethane	<0.0042 *		0.0042	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/06/19 19:45	11/16/19 02:16	1
4-Bromofluorobenzene (Surr)	89		75 - 131	11/06/19 19:45	11/16/19 02:16	1
Dibromofluoromethane	99		75 - 126	11/06/19 19:45	11/16/19 02:16	1
Toluene-d8 (Surr)	93		75 - 124	11/06/19 19:45	11/16/19 02:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B01

Lab Sample ID: 500-172988-1

Date Collected: 11/05/19 12:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Acenaphthylene	0.014	J	0.038	0.0050	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Anthracene	0.028	J	0.038	0.0063	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Benzo[a]anthracene	0.14		0.038	0.0051	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Benzo[a]pyrene	0.18		0.038	0.0073	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Benzo[b]fluoranthene	0.26		0.038	0.0082	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Benzo[g,h,i]perylene	0.10		0.038	0.012	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Benzo[k]fluoranthene	0.080		0.038	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Chrysene	0.16		0.038	0.010	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Dibenz(a,h)anthracene	0.026	J	0.038	0.0073	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Fluoranthene	0.26		0.038	0.0070	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B01

Lab Sample ID: 500-172988-1

Date Collected: 11/05/19 12:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.091		0.038	0.0098	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Phenanthrene	0.080		0.038	0.0053	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Pyrene	0.22		0.038	0.0075	mg/Kg	☼	11/17/19 14:28	11/19/19 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	44		31 - 143				11/17/19 14:28	11/19/19 17:07	1
2-Fluorobiphenyl	76		43 - 145				11/17/19 14:28	11/19/19 17:07	1
2-Fluorophenol	96		31 - 166				11/17/19 14:28	11/19/19 17:07	1
Nitrobenzene-d5	76		37 - 147				11/17/19 14:28	11/19/19 17:07	1
Phenol-d5	87		30 - 153				11/17/19 14:28	11/19/19 17:07	1
Terphenyl-d14	88		42 - 157				11/17/19 14:28	11/19/19 17:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.66	J	1.1	0.21	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Arsenic	9.1		0.55	0.19	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Barium	88		0.55	0.063	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Beryllium	0.68		0.22	0.051	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Boron	7.5		2.8	0.26	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Cadmium	0.23	B	0.11	0.020	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Calcium	31000	B	11	1.9	mg/Kg	☼	11/14/19 17:39	11/18/19 11:41	1
Chromium	15		0.55	0.27	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Cobalt	13		0.28	0.072	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Copper	22		0.55	0.15	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Iron	22000		11	5.7	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Lead	21		0.28	0.13	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Magnesium	23000	B	5.5	2.7	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Manganese	610		0.55	0.080	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Nickel	31		0.55	0.16	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Potassium	1900		28	9.8	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Selenium	0.40	J	0.55	0.32	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Silver	3.2		0.28	0.071	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Sodium	210		55	8.2	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Thallium	0.81		0.55	0.28	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Vanadium	23		0.28	0.065	mg/Kg	☼	11/14/19 17:39	11/15/19 19:42	1
Zinc	75		1.1	0.48	mg/Kg	☼	11/14/19 17:39	11/18/19 11:41	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		11/14/19 15:55	11/15/19 21:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/14/19 15:55	11/15/19 21:34	1
Chromium	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:34	1
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B01

Lab Sample ID: 500-172988-1

Date Collected: 11/05/19 12:30

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:34	1
Manganese	0.17		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:34	1
Nickel	<0.025		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.061		0.050	0.010	mg/L		11/08/19 15:37	11/12/19 14:54	1
Barium	0.58		0.50	0.050	mg/L		11/08/19 15:37	11/12/19 14:54	1
Beryllium	0.0057		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 14:54	1
Boron	0.12		0.10	0.050	mg/L		11/08/19 15:37	11/12/19 14:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 14:54	1
Calcium	28		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:54	1
Chromium	0.13		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:54	1
Cobalt	0.038		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:54	1
Iron	160		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 14:54	1
Lead	0.068		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 14:54	1
Manganese	0.78		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:54	1
Nickel	0.15 ^		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:54	1
Potassium	21		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 14:54	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 14:54	1
Silver	0.011 J		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 14:54	1
Zinc	0.50		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 14:54	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		11/14/19 15:55	11/19/19 04:19	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		11/08/19 15:37	11/14/19 17:12	1
Thallium	0.0031		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00021		0.00020	0.00020	mg/L		11/12/19 09:20	11/13/19 09:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.017	0.0058	mg/Kg	☼	11/07/19 14:15	11/08/19 09:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.22	mg/Kg	☼	11/19/19 09:45	11/19/19 14:48	1
pH	7.9		0.2	0.2	SU			11/08/19 15:57	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B02

Lab Sample ID: 500-172988-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/06/19 19:45	11/16/19 02:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/06/19 19:45	11/16/19 02:42	1
4-Bromofluorobenzene (Surr)	92		75 - 131	11/06/19 19:45	11/16/19 02:42	1
Dibromofluoromethane	92		75 - 126	11/06/19 19:45	11/16/19 02:42	1
Toluene-d8 (Surr)	97		75 - 124	11/06/19 19:45	11/16/19 02:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B02

Lab Sample ID: 500-172988-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 87.2

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	☼	11/17/19 14:28	11/19/19 17:36	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Acenaphthylene	0.039		0.036	0.0048	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Anthracene	0.089		0.036	0.0060	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Benzo[a]anthracene	0.49		0.036	0.0049	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Benzo[a]pyrene	0.41		0.036	0.0070	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Benzo[b]fluoranthene	1.5		0.036	0.0078	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Benzo[g,h,i]perylene	0.20		0.036	0.012	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Benzo[k]fluoranthene	0.45		0.036	0.011	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Chrysene	1.3		0.036	0.0098	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Dibenz(a,h)anthracene	0.096		0.036	0.0070	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Fluoranthene	0.45		0.036	0.0067	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Fluorene	0.0087	J	0.036	0.0051	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B02

Lab Sample ID: 500-172988-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 87.2

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	0.18		0.036	0.0094	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Phenanthrene	0.052		0.036	0.0050	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Pyrene	0.70		0.036	0.0072	mg/Kg	☼	11/17/19 14:28	11/19/19 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	62		31 - 143				11/17/19 14:28	11/19/19 17:36	1
2-Fluorobiphenyl	73		43 - 145				11/17/19 14:28	11/19/19 17:36	1
2-Fluorophenol	90		31 - 166				11/17/19 14:28	11/19/19 17:36	1
Nitrobenzene-d5	71		37 - 147				11/17/19 14:28	11/19/19 17:36	1
Phenol-d5	84		30 - 153				11/17/19 14:28	11/19/19 17:36	1
Terphenyl-d14	90		42 - 157				11/17/19 14:28	11/19/19 17:36	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.1	0.21	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Arsenic	7.0		0.54	0.18	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Barium	58		0.54	0.061	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Beryllium	0.66		0.22	0.050	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Boron	9.6		2.7	0.25	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Cadmium	0.28	B	0.11	0.019	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Calcium	85000	B	110	18	mg/Kg	☼	11/14/19 17:39	11/18/19 11:53	10
Chromium	13		0.54	0.27	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Cobalt	8.9		0.27	0.071	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Copper	17		0.54	0.15	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Iron	18000		11	5.6	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Lead	44		0.27	0.12	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Magnesium	47000		54	27	mg/Kg	☼	11/14/19 17:39	11/18/19 11:53	10
Manganese	460		0.54	0.078	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Nickel	20		0.54	0.16	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Potassium	1500		27	9.5	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Selenium	0.56		0.54	0.32	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Silver	2.5		0.27	0.069	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Sodium	400		54	8.0	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Thallium	0.40	J	0.54	0.27	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Vanadium	19		0.27	0.064	mg/Kg	☼	11/14/19 17:39	11/15/19 19:46	1
Zinc	100		1.1	0.47	mg/Kg	☼	11/14/19 17:39	11/18/19 11:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		11/14/19 15:55	11/15/19 21:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/14/19 15:55	11/15/19 21:38	1
Manganese	0.082		0.025	0.010	mg/L		11/14/19 15:55	11/15/19 21:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Client Sample ID: 3222V-21-B02

Lab Sample ID: 500-172988-2

Date Collected: 11/05/19 12:40

Matrix: Solid

Date Received: 11/06/19 11:00

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.038	J	0.050	0.010	mg/L		11/08/19 15:37	11/12/19 15:01	1
Barium	0.34	J	0.50	0.050	mg/L		11/08/19 15:37	11/12/19 15:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/08/19 15:37	11/12/19 15:01	1
Boron	0.091	J	0.10	0.050	mg/L		11/08/19 15:37	11/12/19 15:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/08/19 15:37	11/12/19 15:01	1
Calcium	21		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:01	1
Chromium	0.092		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:01	1
Cobalt	0.024	J	0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:01	1
Iron	100		0.40	0.20	mg/L		11/08/19 15:37	11/12/19 15:01	1
Lead	0.11		0.0075	0.0075	mg/L		11/08/19 15:37	11/12/19 15:01	1
Manganese	0.63		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:01	1
Nickel	0.097		0.025	0.010	mg/L		11/08/19 15:37	11/13/19 20:25	1
Potassium	14		2.5	0.50	mg/L		11/08/19 15:37	11/12/19 15:01	1
Selenium	<0.050		0.050	0.020	mg/L		11/08/19 15:37	11/12/19 15:01	1
Silver	<0.025		0.025	0.010	mg/L		11/08/19 15:37	11/12/19 15:01	1
Zinc	4.0		0.50	0.020	mg/L		11/08/19 15:37	11/12/19 15:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		11/14/19 15:55	11/19/19 04:30	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		11/08/19 15:37	11/14/19 17:20	1
Thallium	0.0023		0.0020	0.0020	mg/L		11/08/19 15:37	11/14/19 17:20	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		11/12/19 09:20	11/13/19 09:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.066		0.018	0.0061	mg/Kg	☼	11/07/19 14:15	11/08/19 09:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.23	mg/Kg	☼	11/19/19 09:45	11/19/19 14:48	1
pH	7.9		0.2	0.2	SU			11/08/19 16:01	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-029

Job ID: 500-172988-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 - AE7-029

Job ID: 500-172988-1

Laboratory: Eurofins TestAmerica, Chicago


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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20


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	 500-172988 COC	Laboratory	Project Name: <u>AE7-29A</u>	COC No.: <u>1</u> of <u>1</u>	
		Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: <u>P-TIA/WO-184-006/29A</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other	Lab Job No.: <u>500-172988</u> Sample Temp: <u>56.9, 24</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 MAC, run ASTM D3987 (Neutral Leach) cyanide.		ANALYSES			Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES												Comments
					VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	
1	3222V-21-1801	11-5-19	1230	S	X	X					X	X	X	X	X		
2	3222V-21-1802	↓	1240	↓	↓	↓					↓	↓	↓	↓	↓		

Relinquished by: 	Date/Time: <u>11/5/19 5:00pm</u>	Received by: <u>Aneeta Balakrishnan</u>	Date/Time: <u>11/5/19 5:00pm</u>
Relinquished by: <u>Aneeta Balakrishnan</u>	Date/Time: <u>11/6/19 9:05am</u>	Received by: <u>P. Neal</u>	Date/Time: <u>11/6/19 0905</u>
Relinquished by: <u>P. Neal</u>	Date/Time: <u>11/6/19 1100</u>	Received by: <u>Shirley Scott</u>	Date/Time: <u>11/6/19 1100</u>

