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 346 (US 41/North Skokie Highway) Office Phone Number, if available:

Physical Site Location (address, including number and street):
0-100 blocks of North Skokie Highway (Skokie Highway to the north of Rockland Road)

City: Lake Bluff & Unincorporated State: IL Zip Code: 60044

County: Cook Township: Shields

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

Latitude: 42.27921 (Decimal Degrees) Longitude: - 87.87049 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: 0971255154 BOW: BOA:

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

Estimated Volume of debris (cu. Yd.): 120

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.

Project Name: FAP 346 (US 41/North Skokie Highway) Latitude: 42.27921 Longitude: - 87.87049

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 1896V3-42-B03 WAS SAMPLED ADJACENT TO SITE 1896V3-42. SEE TABLE 3a 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: 500-227228-1.

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:

Jul 1, 2024
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
1,1,2,2-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 1896V3-42
ROW

Sample ID	1896V3-42-B03-1	1896V3-42-B03-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7	7-14					
Sample Date	12/20/2022	12/20/2022	[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	7.9	8					
Matrix	Soil	Soil					
No Contaminants of Concern Noted.							

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Colleen Grey
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

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JOB DESCRIPTION

IDOT - AE8-006

JOB NUMBER

500-227228-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization

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Authorized for release by
Richard Wright, Senior Project Manager
Richard.Wright@et.eurofinsus.com
(708)746-0045

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-006

Job ID: 500-227228-1

Client Sample ID: 1896V3-42-B03-1
Date Collected: 12/20/22 10:00
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-8
Matrix: Solid
Percent Solids: 85.1

Method: SW846 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	☼	12/22/22 06:27	12/30/22 13:47	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Toluene	**0.00077**	**J**	0.0016	0.00040	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/22/22 06:27	12/30/22 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*12/22/22 06:27*	*12/30/22 13:47*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*12/22/22 06:27*	*12/30/22 13:47*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*12/22/22 06:27*	*12/30/22 13:47*	*1*
Toluene-d8 (Surr)	*89*		*75 - 124*	*12/22/22 06:27*	*12/30/22 13:47*	*1*

Method: SW846 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	☼	12/29/22 14:46	01/05/23 21:15	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1

Client Sample ID: 1896V3-42-B03-1
Date Collected: 12/20/22 10:00
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-8
Matrix: Solid
Percent Solids: 85.1

Method: SW846 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	☼	12/29/22 14:46	01/05/23 21:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2-Methylnaphthalene	**0.018**	**J**	0.076	0.0069	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1

Client Sample ID: 1896V3-42-B03-1
Date Collected: 12/20/22 10:00
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-8
Matrix: Solid
Percent Solids: 85.1

Method: SW846 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	☼	12/29/22 14:46	01/05/23 21:15	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Naphthalene	**0.0096**	**J**	0.038	0.0058	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Phenanthrene	**0.016**	**J B**	0.038	0.0053	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/29/22 14:46	01/05/23 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*31 - 143*	*12/29/22 14:46*	*01/05/23 21:15*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*12/29/22 14:46*	*01/05/23 21:15*	*1*
2-Fluorophenol	*55*		*31 - 166*	*12/29/22 14:46*	*01/05/23 21:15*	*1*
Nitrobenzene-d5 (Surr)	*47*		*37 - 147*	*12/29/22 14:46*	*01/05/23 21:15*	*1*
Phenol-d5	*52*		*30 - 153*	*12/29/22 14:46*	*01/05/23 21:15*	*1*
Terphenyl-d14 (Surr)	*68*		*42 - 157*	*12/29/22 14:46*	*01/05/23 21:15*	*1*

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.31**	**J**	1.1	0.22	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Arsenic	**5.6**		0.57	0.20	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Barium	**34**		0.57	0.065	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Beryllium	**0.71**		0.23	0.053	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Boron	**12**	**B**	2.9	0.27	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Cadmium	**0.11**		0.11	0.021	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Calcium	**96000**	**B**	57	9.7	mg/Kg	☼	12/30/22 14:55	01/04/23 16:28	5
Chromium	**17**		0.57	0.28	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Cobalt	**12**		0.29	0.075	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Copper	**21**		0.57	0.16	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Iron	**17000**		11	6.0	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Lead	**12**		0.29	0.13	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Magnesium	**32000**		5.7	2.8	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Manganese	**420**		0.57	0.083	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Nickel	**30**		0.57	0.17	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Potassium	**2600**		29	10	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Silver	<1.4		1.4	0.37	mg/Kg	☼	12/30/22 14:55	01/04/23 16:28	5
Sodium	**350**		57	8.5	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Vanadium	**18**		0.29	0.068	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1
Zinc	**46**		1.1	0.50	mg/Kg	☼	12/30/22 14:55	01/03/23 17:35	1

Method: SW846 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		01/09/23 08:49	01/09/23 17:35	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-006

Job ID: 500-227228-1

Client Sample ID: 1896V3-42-B03-1

Date Collected: 12/20/22 10:00
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-8

Matrix: Solid
Percent Solids: 85.1

Method: SW846 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		01/09/23 08:52	01/10/23 11:53	1
Barium	**0.056**	**J**	0.50	0.050	mg/L		01/09/23 08:52	01/10/23 11:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/09/23 08:52	01/10/23 11:53	1
Boron	**0.075**	**J**	0.10	0.050	mg/L		01/09/23 08:52	01/10/23 11:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/09/23 08:52	01/10/23 11:53	1
Calcium	**18**		2.5	0.50	mg/L		01/09/23 08:52	01/10/23 11:53	1
Chromium	**0.018**	**J**	0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:53	1
Cobalt	<0.025		0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:53	1
Iron	**10**		0.40	0.20	mg/L		01/09/23 08:52	01/10/23 11:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/09/23 08:52	01/10/23 11:53	1
Manganese	**0.099**		0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:53	1
Nickel	**0.016**	**J**	0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:53	1
Potassium	**6.6**		2.5	0.50	mg/L		01/09/23 08:52	01/10/23 11:53	1
Selenium	<0.050		0.050	0.020	mg/L		01/09/23 08:52	01/10/23 11:53	1
Silver	<0.025		0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:53	1
Zinc	**0.031**	**J**	0.50	0.020	mg/L		01/09/23 08:52	01/10/23 11:53	1

Method: SW846 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		01/09/23 08:52	01/09/23 18:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/09/23 08:52	01/09/23 18:49	1

Method: SW846 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		01/09/23 15:05	01/10/23 09:23	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.018	0.0059	mg/Kg	☼	01/03/23 14:10	01/04/23 09:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.59		0.59	0.22	mg/Kg	☼	12/30/22 15:04	12/30/22 16:50	1
pH (SW846 9045D)	**7.9**	**H**	0.2	0.2	SU			12/28/22 11:40	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-006

Job ID: 500-227228-1

Client Sample ID: 1896V3-42-B03-2
Date Collected: 12/20/22 10:10
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-9
Matrix: Solid
Percent Solids: 83.8

Method: SW846 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	☼	12/22/22 06:27	12/30/22 14:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Acetone	**0.0069**	**J**	0.016	0.0069	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Benzene	**0.00065**	**J**	0.0016	0.00040	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/22/22 06:27	12/30/22 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*12/22/22 06:27*	*12/30/22 14:13*	*1*
4-Bromofluorobenzene (Surr)	*89*		*75 - 131*	*12/22/22 06:27*	*12/30/22 14:13*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*12/22/22 06:27*	*12/30/22 14:13*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*12/22/22 06:27*	*12/30/22 14:13*	*1*

Method: SW846 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	☼	12/29/22 14:46	01/05/23 21:36	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1

Client Sample ID: 1896V3-42-B03-2
Date Collected: 12/20/22 10:10
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-9
Matrix: Solid
Percent Solids: 83.8

Method: SW846 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	☼	12/29/22 14:46	01/05/23 21:36	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2-Methylnaphthalene	**0.067**	**J**	0.077	0.0070	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Chrysene	**0.014**	**J**	0.038	0.010	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1

Client Sample ID: 1896V3-42-B03-2

Date Collected: 12/20/22 10:10
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-9

Matrix: Solid
Percent Solids: 83.8

Method: SW846 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	☼	12/29/22 14:46	01/05/23 21:36	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Naphthalene	**0.023**	**J**	0.038	0.0059	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Phenanthrene	**0.050**	**B**	0.038	0.0053	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1
Pyrene	**0.012**	**J**	0.038	0.0076	mg/Kg	☼	12/29/22 14:46	01/05/23 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*109*		*31 - 143*	*12/29/22 14:46*	*01/05/23 21:36*	*1*
2-Fluorobiphenyl	*100*		*43 - 145*	*12/29/22 14:46*	*01/05/23 21:36*	*1*
2-Fluorophenol	*90*		*31 - 166*	*12/29/22 14:46*	*01/05/23 21:36*	*1*
Nitrobenzene-d5 (Surr)	*82*		*37 - 147*	*12/29/22 14:46*	*01/05/23 21:36*	*1*
Phenol-d5	*97*		*30 - 153*	*12/29/22 14:46*	*01/05/23 21:36*	*1*
Terphenyl-d14 (Surr)	*105*		*42 - 157*	*12/29/22 14:46*	*01/05/23 21:36*	*1*

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.33**	**J**	1.1	0.22	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Arsenic	**5.4**		0.57	0.20	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Barium	**48**		0.57	0.065	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Beryllium	**0.84**		0.23	0.054	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Boron	**16**	**B**	2.9	0.27	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Cadmium	**0.10**	**J**	0.11	0.021	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Calcium	**13000**	**B**	57	9.7	mg/Kg	☼	12/30/22 14:55	01/04/23 16:37	5
Chromium	**19**		0.57	0.28	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Cobalt	**13**		0.29	0.075	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Copper	**20**		0.57	0.16	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Iron	**19000**		11	6.0	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Lead	**11**		0.29	0.13	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Magnesium	**30000**		5.7	2.8	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Manganese	**380**		0.57	0.083	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Nickel	**32**		0.57	0.17	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Potassium	**3400**		29	10	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Silver	<1.4		1.4	0.37	mg/Kg	☼	12/30/22 14:55	01/04/23 16:37	5
Sodium	**210**		57	8.5	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Vanadium	**21**		0.29	0.068	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1
Zinc	**45**		1.1	0.50	mg/Kg	☼	12/30/22 14:55	01/03/23 17:38	1

Method: SW846 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		01/09/23 08:49	01/09/23 17:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/09/23 08:49	01/09/23 17:38	1
Manganese	**1.8**		0.025	0.010	mg/L		01/09/23 08:49	01/09/23 17:38	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-006

Job ID: 500-227228-1

Client Sample ID: 1896V3-42-B03-2

Date Collected: 12/20/22 10:10
Date Received: 12/21/22 14:40

Lab Sample ID: 500-227228-9

Matrix: Solid
Percent Solids: 83.8

Method: SW846 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		01/09/23 08:52	01/10/23 11:56	1
Barium	**0.14**	**J**	0.50	0.050	mg/L		01/09/23 08:52	01/10/23 11:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/09/23 08:52	01/10/23 11:56	1
Boron	**0.089**	**J**	0.10	0.050	mg/L		01/09/23 08:52	01/10/23 11:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/09/23 08:52	01/10/23 11:56	1
Calcium	**26**		2.5	0.50	mg/L		01/09/23 08:52	01/10/23 11:56	1
Chromium	**0.037**		0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:56	1
Cobalt	**0.012**	**J**	0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:56	1
Iron	**22**		0.40	0.20	mg/L		01/09/23 08:52	01/10/23 11:56	1
Lead	**0.014**		0.0075	0.0075	mg/L		01/09/23 08:52	01/10/23 11:56	1
Manganese	**0.21**		0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:56	1
Nickel	**0.033**		0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:56	1
Potassium	**12**		2.5	0.50	mg/L		01/09/23 08:52	01/10/23 11:56	1
Selenium	<0.050		0.050	0.020	mg/L		01/09/23 08:52	01/10/23 11:56	1
Silver	<0.025		0.025	0.010	mg/L		01/09/23 08:52	01/10/23 11:56	1
Zinc	**0.053**	**J**	0.50	0.020	mg/L		01/09/23 08:52	01/10/23 11:56	1

Method: SW846 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		01/09/23 08:52	01/09/23 18:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/09/23 08:52	01/09/23 18:51	1

Method: SW846 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		01/09/23 15:05	01/10/23 09:25	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.018	0.0061	mg/Kg	☼	01/03/23 14:10	01/04/23 09:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.60		0.60	0.23	mg/Kg	☼	12/30/22 15:05	12/30/22 16:52	1
pH (SW846 9045D)	**8.0**	**H**	0.2	0.2	SU			12/28/22 11:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-006

Job ID: 500-227228-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

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.

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.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-006

Job ID: 500-227228-1

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	Project Name AE8-006A	COC No 1 of 1
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng com 500-227228 COC	Lab ~~Teklab, Inc.~~ Eurofins Address ~~5445 Horseshoe Lake Road~~ ~~Collinsville, IL 62234~~ Phone ~~877-344-1003~~ Contact ~~Shelly Hennessy~~ email ~~shennessy@teklabinc.com~~	Project No PTB/W0 195-002/06A TAT [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ___ Other Sampler: C. Nelson / S. Khodaei	Lab Job No 500-227228 Sample Temp 3.1-7.2.1, 4.6-5.1

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

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

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	1896V3-42-B01-1	12/21/22	1100	S	X	X					X	X	X	X	X					
2	1896V3-42-B01-2	↓	1110	↓	↓	↓					↓	↓	↓	↓	↓					
3	1896V3-42-B01-3	↓	1120	↓	↓	↓					↓	↓	↓	↓	↓					
4	1896V3-42-B02-1	↓	1020	↓	↓	↓					↓	↓	↓	↓	↓					
5	1896V3-42-B02-2	↓	1030	↓	↓	↓					↓	↓	↓	↓	↓					
6	1896V3-42-B02-3	↓	1040	↓	↓	↓					↓	↓	↓	↓	↓					
7	1896V3-42-B02-3DUP	↓	1050	↓	↓	↓					↓	↓	↓	↓	↓					
8	1896V3-42-B03-1	↓	1000	↓	↓	↓					↓	↓	↓	↓	↓					
9	1896V3-42-B03-2	↓	1010	↓	↓	↓					↓	↓	↓	↓	↓					
10	Trip Blank #6				X															

Relinquished by	Date/Time	Received by	Date/Time
Saeid Khodaei	12/21/22 13:10	[signature] EETA 12/21	1310
[signature] EETA 12/21	1440	[signature]	12/21/22 1440

L:\IDOT\AE7 PTB 184-006\Subcontractors\COC Templates\AE7 COC Template (Teklab).xlsx

0.3/0.1

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No: 500-168934.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Richard.Wright@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - Illinois		Job #: 500-227228-1
Address: 180 S. Van Buren Avenue, ,	Due Date Requested: 1/7/2023			
City: Barberton	TAT Requested (days):			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: IDOT AE8-006	Project #: 50020919			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

e139

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Cyanide, Total	Total Number of containers
			Preservation Code:					
1896V3-42-B01-1 (500-227228-1)	12/20/22	11:00 Central		Solid			X	1
1896V3-42-B01-2 (500-227228-2)	12/20/22	11:10 Central		Solid			X	1
1896V3-42-B01-3 (500-227228-3)	12/20/22	11:20 Central		Solid			X	1
1896V3-42-B02-1 (500-227228-4)	12/20/22	10:20 Central		Solid			X	1
1896V3-42-B02-2 (500-227228-5)	12/20/22	10:30 Central		Solid			X	1
1896V3-42-B02-3 (500-227228-6)	12/20/22	10:40 Central		Solid			X	1
1896V3-42-B02-3 Dup (500-227228-7)	12/20/22	10:50 Central		Solid			X	1
1896V3-42-B03-1 (500-227228-8)	12/20/22	10:00 Central		Solid			X	1
1896V3-42-B03-2 (500-227228-9)	12/20/22	10:10 Central		Solid			X	1

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Nicole J. Ward	12/27 16:05			12-29-22 1000	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

1/10/2023

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 346 (US 41/North Skokie Highway) Office Phone Number, if available:

Physical Site Location (address, including number and street):
11-21 North Skokie Highway

City: Lake Bluff & Unincorporated State: IL Zip Code: 60044

County: Cook Township: Shields

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

Latitude: 42.27979 (Decimal Degrees) Longitude: -87.87019 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: 0970755124 BOW: BOA:

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

Estimated Volume of debris (cu. Yd.): 4,263

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 1896V2-43-B01, 1896V2-43-B02, 1896V2-43-B03, 1896V2-43-B05, 1896V2-43-B06, 1896V2-43-B07 AND 1896V2-43-B08 WERE SAMPLED ADJACENT TO SITES 1896V3-43 AND 1896V3-45. SEE TABLE 3b 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: 500-167280-1.

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:

Jul 1, 2024
Date:

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

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

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
1,1,2,2-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 1896V3-43
Rockland Plaza

Sample ID	1896V2-43-B01	1896V2-43-B02	1896V2-43-B03-1	1896V2-43-B03-2	1896V2-43-B03-3	1896V2-43-B03-4	Maximum Allowable Concentration				
Sample Depth (ft)	0-8	0-8	0-7	7-14	14-21	21-28					
Sample Date	7/24/2019	7/24/2019	7/24/2019	7/24/2019	7/24/2019	7/24/2019					
PID	0	0	0	0	0	0					
Sample pH	8.7	8.7	8.5	8	8.2	8.3	[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
Matrix	Soil	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.											

Sample ID	1896V2-43-B03-5	1896V2-43-B05-1	1896V2-43-B05-2	1896V2-43-B05-3	1896V2-43-B05-4	1896V2-43-B05-5	Maximum Allowable Concentration				
Sample Depth (ft)	28-36	0-7	7-14	14-21	21-28	28-36					
Sample Date	7/24/2019	7/24/2019	7/24/2019	7/24/2019	7/24/2019	7/24/2019					
PID	0	0	0	0	0	0					
Sample pH	8.2	8.2	7.9	8	8	8.2	[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
Matrix	Soil	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.											

Sample ID	1896V2-43-B06-1	1896V2-43-B06-2	1896V2-43-B06-2 DUP	1896V2-43-B06-3	1896V2-43-B06-4	1896V2-43-B06-5	Maximum Allowable Concentration				
Sample Depth (ft)	0-7	7-14	7-14	14-21	21-28	28-36					
Sample Date	7/24/2019	7/24/2019	7/24/2019	7/24/2019	7/24/2019	7/24/2019					
PID	0	0	0	0	0	0					
Sample pH	8.5	8.1	8.1	8.1	8.2	8.2	[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
Matrix	Soil	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.											

Sample ID	1896V2-43-B07	1896V2-43-B08	Maximum Allowable Concentration				
Sample Depth (ft)	0-8	0-8					
Sample Date	7/24/2019	7/24/2019					
PID	0	0					
Sample pH	8.4	9	[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
Matrix	Soil	Soil					
No Contaminants of Concern Noted.							

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 500-167280-1
Client Project/Site: IDOT - AE7-22A

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/8/2019 3:58:11 PM

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

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B01
Date Collected: 07/24/19 12:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-1
Matrix: Solid
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	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Acetone	**0.010**	**J**	0.015	0.0064	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	07/25/19 17:47	07/31/19 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 134*	*07/25/19 17:47*	*07/31/19 06:47*	*1*
4-Bromofluorobenzene (Surr)	*114*		*75 - 131*	*07/25/19 17:47*	*07/31/19 06:47*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*07/25/19 17:47*	*07/31/19 06:47*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/25/19 17:47*	*07/31/19 06:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B01
Date Collected: 07/24/19 12:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-1
Matrix: Solid
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	☼	07/30/19 15:32	07/31/19 14:48	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Bis(2-ethylhexyl) phthalate	**1.7**		0.19	0.069	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B01
Date Collected: 07/24/19 12:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-1
Matrix: Solid
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	☼	07/30/19 15:32	07/31/19 14:48	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/30/19 15:32	07/31/19 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*31 - 143*	*07/30/19 15:32*	*07/31/19 14:48*	*1*
2-Fluorobiphenyl	*94*		*43 - 145*	*07/30/19 15:32*	*07/31/19 14:48*	*1*
2-Fluorophenol	*95*		*31 - 166*	*07/30/19 15:32*	*07/31/19 14:48*	*1*
Nitrobenzene-d5	*85*		*37 - 147*	*07/30/19 15:32*	*07/31/19 14:48*	*1*
Phenol-d5	*97*		*30 - 153*	*07/30/19 15:32*	*07/31/19 14:48*	*1*
Terphenyl-d14	*110*		*42 - 157*	*07/30/19 15:32*	*07/31/19 14:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.70**	**J B F1**	1.1	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 10:21	1
Arsenic	**7.3**		0.57	0.19	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Barium	**32**		0.57	0.065	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Beryllium	**0.60**		0.23	0.053	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Boron	**11**		2.8	0.26	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Cadmium	**0.18**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Calcium	**64000**	**B**	57	9.6	mg/Kg	☼	07/27/19 16:37	07/31/19 14:01	5
Chromium	**16**		0.57	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Cobalt	**12**		0.28	0.074	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Copper	**20**		0.57	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Iron	**21000**		11	5.9	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Lead	**13**	**F1**	0.28	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Magnesium	**32000**		5.7	2.8	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Manganese	**470**		0.57	0.082	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Nickel	**29**		0.57	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Potassium	**2400**		28	10	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Selenium	**0.78**	**F1 B**	0.57	0.33	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Silver	**2.3**		0.28	0.073	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Sodium	**570**		57	8.4	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Thallium	**0.70**		0.57	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Vanadium	**20**		0.28	0.067	mg/Kg	☼	07/27/19 16:37	07/31/19 01:42	1
Zinc	**59**	**F1**	1.1	0.50	mg/Kg	☼	07/27/19 16:37	08/01/19 10:21	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		07/27/19 15:46	07/31/19 03:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:46	07/31/19 03:56	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 03:56	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:46	07/31/19 03:56	1

Client Sample ID: 1896V2-43-B01
Date Collected: 07/24/19 12:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-1
Matrix: Solid
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		07/27/19 15:46	07/31/19 03:56	1
Manganese	**0.62**		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 03:56	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 03:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.073**		0.050	0.010	mg/L		07/27/19 15:40	07/30/19 03:35	1
Barium	**0.40**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 03:35	1
Beryllium	**0.0061**		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 03:35	1
Boron	**0.18**		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 03:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 03:35	1
Calcium	**43**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:35	1
Chromium	**0.16**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:35	1
Cobalt	**0.048**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:35	1
Iron	**180**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 03:35	1
Lead	**0.095**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 03:35	1
Manganese	**0.61**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:35	1
Nickel	**0.19**		0.025	0.010	mg/L		07/27/19 15:40	07/31/19 00:44	1
Potassium	**36**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:35	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 03:35	1
Silver	**0.013**	**J**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:35	1
Zinc	**0.52**		0.50	0.020	mg/L		07/27/19 15:40	07/31/19 10:36	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		07/27/19 15:46	08/02/19 20:14	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		07/27/19 15:40	08/01/19 15:44	1
Thallium	**0.0036**		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 15:44	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		07/31/19 11:20	08/01/19 08:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0056	mg/Kg	☼	08/02/19 13:00	08/05/19 09:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	08/06/19 15:45	08/07/19 10:53	1
pH	**8.7**		0.2	0.2	SU			07/30/19 13:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B02
Date Collected: 07/24/19 11:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-2
Matrix: Solid
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	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Acetone	**0.048**		0.015	0.0067	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Bromomethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 07:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 134*	*07/25/19 17:47*	*07/31/19 07:12*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*07/25/19 17:47*	*07/31/19 07:12*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*07/25/19 17:47*	*07/31/19 07:12*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*07/25/19 17:47*	*07/31/19 07:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1

Client Sample ID: 1896V2-43-B02
Date Collected: 07/24/19 11:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-2
Matrix: Solid
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	<0.38		0.38	0.087	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2,4-Dinitrophenol	<0.77	F1	0.77	0.67	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
4-Chloroaniline	<0.77	F1	0.77	0.18	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
4-Nitrophenol	<0.77	F1	0.77	0.36	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Anthracene	<0.038	F1	0.038	0.0064	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Bis(2-ethylhexyl) phthalate	**0.80**		0.19	0.070	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Diethyl phthalate	<0.19	F1	0.19	0.065	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Di-n-butyl phthalate	<0.19	F1	0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Fluoranthene	**0.0092**	**J**	0.038	0.0071	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Hexachlorocyclopentadiene	<0.77	F1	0.77	0.22	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1

Client Sample ID: 1896V2-43-B02

Date Collected: 07/24/19 11:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-2

Matrix: Solid
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	<0.038		0.038	0.0099	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Phenanthrene	<0.038	F1	0.038	0.0053	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1
Pyrene	**0.0089**	**J**	0.038	0.0076	mg/Kg	☼	07/30/19 15:32	07/31/19 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*101*		*31 - 143*	*07/30/19 15:32*	*07/31/19 15:16*	*1*
2-Fluorobiphenyl	*101*		*43 - 145*	*07/30/19 15:32*	*07/31/19 15:16*	*1*
2-Fluorophenol	*99*		*31 - 166*	*07/30/19 15:32*	*07/31/19 15:16*	*1*
Nitrobenzene-d5	*97*		*37 - 147*	*07/30/19 15:32*	*07/31/19 15:16*	*1*
Phenol-d5	*108*		*30 - 153*	*07/30/19 15:32*	*07/31/19 15:16*	*1*
Terphenyl-d14	*113*		*42 - 157*	*07/30/19 15:32*	*07/31/19 15:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.94**	**J B**	1.1	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 10:49	1
Arsenic	**5.2**		0.57	0.19	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Barium	**55**		0.57	0.065	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Beryllium	**0.56**		0.23	0.053	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Boron	**9.7**		2.8	0.26	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Cadmium	**0.20**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Calcium	**76000**	**B**	57	9.6	mg/Kg	☼	07/27/19 16:37	07/31/19 14:21	5
Chromium	**14**		0.57	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Cobalt	**9.0**		0.28	0.074	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Copper	**15**		0.57	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Iron	**15000**		11	5.9	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Lead	**9.8**		0.28	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Magnesium	**30000**		5.7	2.8	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Manganese	**500**		0.57	0.082	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Nickel	**23**		0.57	0.17	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Potassium	**1800**		28	10	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Silver	**2.4**		0.28	0.073	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Sodium	**250**		57	8.4	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Thallium	**0.36**	**J**	0.57	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Vanadium	**21**		0.28	0.067	mg/Kg	☼	07/27/19 16:37	07/31/19 02:03	1
Zinc	**43**		1.1	0.50	mg/Kg	☼	07/27/19 16:37	08/01/19 10:49	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		07/27/19 15:46	07/31/19 04:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:46	07/31/19 04:08	1
Manganese	**2.7**		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 04:08	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B02

Date Collected: 07/24/19 11:00
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-2

Matrix: Solid
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.022**	**J**	0.050	0.010	mg/L		07/27/19 15:40	07/30/19 03:39	1
Barium	**0.29**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 03:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 03:39	1
Boron	**0.12**		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 03:39	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 03:39	1
Calcium	**21**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:39	1
Chromium	**0.077**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:39	1
Cobalt	**0.020**	**J**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:39	1
Iron	**68**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 03:39	1
Lead	**0.045**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 03:39	1
Manganese	**0.49**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:39	1
Nickel	**0.072**		0.025	0.010	mg/L		07/27/19 15:40	07/31/19 00:48	1
Potassium	**19**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:39	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 03:39	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:39	1
Zinc	**0.16**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 03:39	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		07/27/19 15:40	08/01/19 15:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/31/19 11:20	08/01/19 08:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**		0.017	0.0058	mg/Kg	☼	08/02/19 13:00	08/05/19 09:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.29	mg/Kg	☼	08/06/19 15:45	08/07/19 10:55	1
pH	**8.7**		0.2	0.2	SU			07/30/19 13:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-1
Date Collected: 07/24/19 10:10
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-3
Matrix: Solid
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	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
1,1-Dichloroethane	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Toluene	<0.0014		0.0014	0.00037	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	07/25/19 17:47	07/31/19 07:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 134*	*07/25/19 17:47*	*07/31/19 07:38*	*1*
4-Bromofluorobenzene (Surr)	*113*		*75 - 131*	*07/25/19 17:47*	*07/31/19 07:38*	*1*
Dibromofluoromethane	*109*		*75 - 126*	*07/25/19 17:47*	*07/31/19 07:38*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/25/19 17:47*	*07/31/19 07:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1

Client Sample ID: 1896V2-43-B03-1
Date Collected: 07/24/19 10:10
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-3
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Bis(2-ethylhexyl) phthalate	**2.0**		0.19	0.070	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-1
Date Collected: 07/24/19 10:10
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-3
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	07/30/19 15:32	07/31/19 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*31 - 143*	*07/30/19 15:32*	*07/31/19 15:43*	*1*
2-Fluorobiphenyl	*105*		*43 - 145*	*07/30/19 15:32*	*07/31/19 15:43*	*1*
2-Fluorophenol	*102*		*31 - 166*	*07/30/19 15:32*	*07/31/19 15:43*	*1*
Nitrobenzene-d5	*101*		*37 - 147*	*07/30/19 15:32*	*07/31/19 15:43*	*1*
Phenol-d5	*113*		*30 - 153*	*07/30/19 15:32*	*07/31/19 15:43*	*1*
Terphenyl-d14	*116*		*42 - 157*	*07/30/19 15:32*	*07/31/19 15:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.58**	**J B**	1.2	0.23	mg/Kg	☼	07/27/19 16:37	08/01/19 10:53	1
Arsenic	**5.9**		0.58	0.20	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Barium	**37**		0.58	0.067	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Beryllium	**0.67**		0.23	0.055	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Boron	**13**		2.9	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Cadmium	**0.20**	**B**	0.12	0.021	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Calcium	**71000**	**B**	58	9.9	mg/Kg	☼	07/27/19 16:37	07/31/19 14:25	5
Chromium	**17**		0.58	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Cobalt	**11**		0.29	0.077	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Copper	**21**		0.58	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Iron	**18000**		12	6.1	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Lead	**11**		0.29	0.14	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Magnesium	**31000**		5.8	2.9	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Manganese	**420**		0.58	0.085	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Nickel	**30**		0.58	0.17	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Potassium	**2900**		29	10	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Selenium	**0.45**	**J B**	0.58	0.34	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Silver	**2.7**		0.29	0.075	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Sodium	**200**		58	8.7	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Thallium	**0.71**		0.58	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Vanadium	**21**		0.29	0.069	mg/Kg	☼	07/27/19 16:37	07/31/19 02:07	1
Zinc	**54**		1.2	0.51	mg/Kg	☼	07/27/19 16:37	08/01/19 10:53	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		07/27/19 15:46	07/31/19 04:13	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 04:13	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:46	07/31/19 04:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:46	07/31/19 04:13	1

Client Sample ID: 1896V2-43-B03-1

Date Collected: 07/24/19 10:10
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-3

Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.57**		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 04:13	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 04:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.045**	**J**	0.050	0.010	mg/L		07/27/19 15:40	07/30/19 03:43	1
Barium	**0.35**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 03:43	1
Beryllium	**0.0045**		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 03:43	1
Boron	**0.16**		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 03:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 03:43	1
Calcium	**46**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:43	1
Chromium	**0.12**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:43	1
Cobalt	**0.039**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:43	1
Iron	**120**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 03:43	1
Lead	**0.058**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 03:43	1
Manganese	**0.53**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:43	1
Nickel	**0.15**		0.025	0.010	mg/L		07/27/19 15:40	07/31/19 00:52	1
Potassium	**30**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:43	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 03:43	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:43	1
Zinc	**0.34**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 03:43	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		07/27/19 15:46	08/02/19 20:18	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		07/27/19 15:40	08/01/19 15:50	1
Thallium	**0.0029**		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 15:50	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		07/31/19 11:20	08/01/19 08:39	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	☼	08/02/19 13:00	08/05/19 09:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	08/06/19 15:45	08/07/19 10:56	1
pH	**8.5**		0.2	0.2	SU			07/30/19 13:48	1

Client Sample ID: 1896V2-43-B03-2
Date Collected: 07/24/19 10:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-4
Matrix: Solid
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	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Acetone	**0.012**	**J**	0.015	0.0064	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Carbon disulfide	<0.0037		0.0037	0.00076	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Methylene Chloride	<0.0037		0.0037	0.0014	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	07/25/19 17:47	07/31/19 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 134*	*07/25/19 17:47*	*07/31/19 08:03*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*07/25/19 17:47*	*07/31/19 08:03*	*1*
Dibromofluoromethane	*111*		*75 - 126*	*07/25/19 17:47*	*07/31/19 08:03*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*07/25/19 17:47*	*07/31/19 08:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1

Client Sample ID: 1896V2-43-B03-2
Date Collected: 07/24/19 10:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-4
Matrix: Solid
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	<0.36		0.36	0.084	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2-Methylnaphthalene	**0.013**	**J**	0.074	0.0067	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Bis(2-ethylhexyl) phthalate	**0.91**		0.18	0.067	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-2
Date Collected: 07/24/19 10:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-4
Matrix: Solid
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	<0.036		0.036	0.0095	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Phenanthrene	**0.037**		0.036	0.0051	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	☼	07/30/19 15:32	07/31/19 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*57*		*31 - 143*	*07/30/19 15:32*	*07/31/19 17:04*	*1*
2-Fluorobiphenyl	*78*		*43 - 145*	*07/30/19 15:32*	*07/31/19 17:04*	*1*
2-Fluorophenol	*77*		*31 - 166*	*07/30/19 15:32*	*07/31/19 17:04*	*1*
Nitrobenzene-d5	*71*		*37 - 147*	*07/30/19 15:32*	*07/31/19 17:04*	*1*
Phenol-d5	*85*		*30 - 153*	*07/30/19 15:32*	*07/31/19 17:04*	*1*
Terphenyl-d14	*85*		*42 - 157*	*07/30/19 15:32*	*07/31/19 17:04*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.57**	**J B**	1.1	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 10:57	1
Arsenic	**6.8**		0.55	0.19	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Barium	**33**		0.55	0.063	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Beryllium	**0.58**		0.22	0.052	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Boron	**13**		2.8	0.26	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Cadmium	**0.16**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Calcium	**74000**	**B**	55	9.4	mg/Kg	☼	07/27/19 16:37	07/31/19 14:29	5
Chromium	**15**		0.55	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Cobalt	**11**		0.28	0.073	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Copper	**21**		0.55	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Iron	**17000**		11	5.8	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Lead	**11**		0.28	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Magnesium	**33000**		5.5	2.8	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Manganese	**450**		0.55	0.080	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Nickel	**27**		0.55	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Potassium	**2600**		28	9.8	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Selenium	<0.55		0.55	0.33	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Silver	**2.0**		0.28	0.072	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Sodium	**160**		55	8.2	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Thallium	**0.35**	**J**	0.55	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Vanadium	**19**		0.28	0.065	mg/Kg	☼	07/27/19 16:37	07/31/19 02:11	1
Zinc	**42**		1.1	0.49	mg/Kg	☼	07/27/19 16:37	08/01/19 10:57	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		07/27/19 15:40	07/30/19 03:47	1
Barium	<0.50		0.50	0.050	mg/L		07/27/19 15:40	07/30/19 03:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 03:47	1
Boron	<0.10		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 03:47	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-2
Date Collected: 07/24/19 10:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-4
Matrix: Solid
Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 03:47	1
Calcium	**15**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:47	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:47	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:47	1
Iron	**3.2**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 03:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 03:47	1
Manganese	**0.043**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:47	1
Nickel	<0.025	^	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:47	1
Potassium	**3.6**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 03:47	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 03:47	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 03:47	1
Zinc	<0.50	^	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 03:47	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		07/27/19 15:40	08/01/19 15:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 15:51	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		07/31/19 11:20	08/01/19 08:40	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	☼	08/02/19 13:00	08/05/19 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	08/06/19 15:45	08/07/19 10:57	1
pH	**8.0**		0.2	0.2	SU			07/30/19 13:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-3
Date Collected: 07/24/19 10:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-5
Matrix: Solid
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	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Acetone	**0.012**	**J**	0.015	0.0067	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Bromomethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 08:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 134*	*07/25/19 17:47*	*07/31/19 08:29*	*1*
4-Bromofluorobenzene (Surr)	*116*		*75 - 131*	*07/25/19 17:47*	*07/31/19 08:29*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*07/25/19 17:47*	*07/31/19 08:29*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*07/25/19 17:47*	*07/31/19 08:29*	*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	☼	07/30/19 15:32	07/31/19 17:31	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1

Client Sample ID: 1896V2-43-B03-3
Date Collected: 07/24/19 10:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-5
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2-Methylnaphthalene	**0.071**	**J**	0.079	0.0072	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Bis(2-ethylhexyl) phthalate	**2.1**		0.20	0.071	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Fluoranthene	**0.0096**	**J**	0.039	0.0072	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1

Client Sample ID: 1896V2-43-B03-3
Date Collected: 07/24/19 10:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-5
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Naphthalene	**0.085**		0.039	0.0060	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Phenanthrene	**0.099**		0.039	0.0054	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1
Pyrene	**0.019**	**J**	0.039	0.0078	mg/Kg	☼	07/30/19 15:32	07/31/19 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*31 - 143*	*07/30/19 15:32*	*07/31/19 17:31*	*1*
2-Fluorobiphenyl	*98*		*43 - 145*	*07/30/19 15:32*	*07/31/19 17:31*	*1*
2-Fluorophenol	*102*		*31 - 166*	*07/30/19 15:32*	*07/31/19 17:31*	*1*
Nitrobenzene-d5	*92*		*37 - 147*	*07/30/19 15:32*	*07/31/19 17:31*	*1*
Phenol-d5	*112*		*30 - 153*	*07/30/19 15:32*	*07/31/19 17:31*	*1*
Terphenyl-d14	*103*		*42 - 157*	*07/30/19 15:32*	*07/31/19 17:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.62**	**J B**	1.1	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 11:01	1
Arsenic	**5.1**		0.56	0.19	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Barium	**46**		0.56	0.064	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Beryllium	**0.73**		0.22	0.052	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Boron	**16**		2.8	0.26	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Cadmium	**0.19**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Calcium	**74000**	**B**	56	9.5	mg/Kg	☼	07/27/19 16:37	07/31/19 14:33	5
Chromium	**18**		0.56	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Cobalt	**13**		0.28	0.073	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Copper	**19**		0.56	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Iron	**17000**		11	5.8	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Lead	**10**		0.28	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Magnesium	**31000**		5.6	2.8	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Manganese	**410**		0.56	0.081	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Nickel	**31**		0.56	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Potassium	**3300**		28	9.9	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Silver	**2.4**		0.28	0.072	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Sodium	**180**		56	8.3	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Thallium	**0.44**	**J**	0.56	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Vanadium	**22**		0.28	0.066	mg/Kg	☼	07/27/19 16:37	07/31/19 02:15	1
Zinc	**57**		1.1	0.49	mg/Kg	☼	07/27/19 16:37	08/01/19 11:01	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		07/27/19 15:46	07/31/19 04:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:46	07/31/19 04:21	1

Client Sample ID: 1896V2-43-B03-3
Date Collected: 07/24/19 10:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-5
Matrix: Solid
Percent Solids: 84.1

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		07/27/19 15:40	07/30/19 04:00	1
Barium	**0.096**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 04:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 04:00	1
Boron	**0.063**	**J**	0.10	0.050	mg/L		07/27/19 15:40	07/30/19 04:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 04:00	1
Calcium	**18**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:00	1
Chromium	**0.021**	**J**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:00	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:00	1
Iron	**12**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 04:00	1
Lead	**0.013**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 04:00	1
Manganese	**0.11**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:00	1
Nickel	**0.014**	**J ^**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:00	1
Potassium	**8.9**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:00	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 04:00	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:00	1
Zinc	**0.095**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 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		07/27/19 15:40	08/01/19 15:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 15:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/31/19 11:20	08/01/19 08:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.020	0.0065	mg/Kg	☼	08/02/19 13:00	08/05/19 09:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	08/06/19 15:45	08/07/19 10:59	1
pH	**8.2**		0.2	0.2	SU			07/30/19 13:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-4
Date Collected: 07/24/19 10:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-6
Matrix: Solid
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	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Acetone	**0.0073**	**J**	0.015	0.0065	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	07/25/19 17:47	07/31/19 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 134*	*07/25/19 17:47*	*07/31/19 23:27*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/25/19 17:47*	*07/31/19 23:27*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*07/25/19 17:47*	*07/31/19 23:27*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*07/25/19 17:47*	*07/31/19 23:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1

Client Sample ID: 1896V2-43-B03-4
Date Collected: 07/24/19 10:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-6
Matrix: Solid
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	0.086	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2-Methylnaphthalene	**0.017**	**J**	0.076	0.0070	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.038	0.012	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Chrysene	**0.033**	**J**	0.038	0.010	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Fluorene	**0.0075**	**J**	0.038	0.0053	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-4
Date Collected: 07/24/19 10:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-6
Matrix: Solid
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	<0.038		0.038	0.0098	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Naphthalene	**0.015**	**J**	0.038	0.0058	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Phenanthrene	**0.055**		0.038	0.0053	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/30/19 15:32	07/31/19 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*108*		*31 - 143*	*07/30/19 15:32*	*07/31/19 17:58*	*1*
2-Fluorobiphenyl	*96*		*43 - 145*	*07/30/19 15:32*	*07/31/19 17:58*	*1*
2-Fluorophenol	*100*		*31 - 166*	*07/30/19 15:32*	*07/31/19 17:58*	*1*
Nitrobenzene-d5	*97*		*37 - 147*	*07/30/19 15:32*	*07/31/19 17:58*	*1*
Phenol-d5	*113*		*30 - 153*	*07/30/19 15:32*	*07/31/19 17:58*	*1*
Terphenyl-d14	*103*		*42 - 157*	*07/30/19 15:32*	*07/31/19 17:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.73**	**J B**	1.2	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 11:05	1
Arsenic	**4.8**		0.58	0.20	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Barium	**42**		0.58	0.066	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Beryllium	**0.63**		0.23	0.054	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Boron	**13**		2.9	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Cadmium	**0.15**	**B**	0.12	0.021	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Calcium	**76000**	**B**	58	9.8	mg/Kg	☼	07/27/19 16:37	07/31/19 14:37	5
Chromium	**16**		0.58	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Cobalt	**11**		0.29	0.076	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Copper	**19**		0.58	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Iron	**16000**		12	6.0	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Lead	**10**		0.29	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Magnesium	**34000**		5.8	2.9	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Manganese	**400**		0.58	0.084	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Nickel	**28**		0.58	0.17	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Potassium	**2700**		29	10	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Silver	**2.1**		0.29	0.075	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Sodium	**170**		58	8.6	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Thallium	**0.47**	**J**	0.58	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Vanadium	**19**		0.29	0.068	mg/Kg	☼	07/27/19 16:37	07/31/19 02:27	1
Zinc	**45**		1.2	0.51	mg/Kg	☼	07/27/19 16:37	08/01/19 11:05	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		07/27/19 15:46	07/31/19 04:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:46	07/31/19 04:25	1
Manganese	**1.8**		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 04:25	1

Client Sample ID: 1896V2-43-B03-4

Date Collected: 07/24/19 10:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-6

Matrix: Solid
Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/27/19 15:40	07/30/19 04:04	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 04:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 04:04	1
Boron	**0.11**		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 04:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 04:04	1
Calcium	**24**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:04	1
Chromium	**0.039**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:04	1
Cobalt	**0.013**	**J**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:04	1
Iron	**24**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 04:04	1
Lead	**0.023**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 04:04	1
Manganese	**0.22**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:04	1
Nickel	**0.032**		0.025	0.010	mg/L		07/27/19 15:40	07/31/19 00:56	1
Potassium	**14**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:04	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 04:04	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:04	1
Zinc	**0.25**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 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		07/27/19 15:40	08/01/19 15:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/31/19 11:20	08/01/19 08:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.017	0.0058	mg/Kg	☼	08/02/19 13:00	08/05/19 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.29	mg/Kg	☼	08/06/19 15:45	08/07/19 10:59	1
pH	**8.3**		0.2	0.2	SU			07/30/19 13:55	1

Client Sample ID: 1896V2-43-B03-5
Date Collected: 07/24/19 10:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-7
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Acetone	**0.0091**	**J**	0.016	0.0071	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	07/25/19 17:47	07/31/19 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*07/25/19 17:47*	*07/31/19 23:52*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*07/25/19 17:47*	*07/31/19 23:52*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*07/25/19 17:47*	*07/31/19 23:52*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*07/25/19 17:47*	*07/31/19 23:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1

Client Sample ID: 1896V2-43-B03-5
Date Collected: 07/24/19 10:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-7
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2-Methylnaphthalene	**0.064**	**J**	0.076	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Acenaphthylene	**0.012**	**J**	0.038	0.0050	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Anthracene	**0.0064**	**J**	0.038	0.0063	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Benzo[a]pyrene	**0.0076**	**J**	0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Bis(2-ethylhexyl) phthalate	**1.5**		0.19	0.069	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Fluoranthene	**0.0098**	**J**	0.038	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1

Client Sample ID: 1896V2-43-B03-5
Date Collected: 07/24/19 10:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-7
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Naphthalene	**0.071**		0.038	0.0058	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Phenanthrene	**0.076**		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1
Pyrene	**0.016**	**J**	0.038	0.0075	mg/Kg	☼	07/30/19 15:41	07/31/19 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*31 - 143*	*07/30/19 15:41*	*07/31/19 18:25*	*1*
2-Fluorobiphenyl	*98*		*43 - 145*	*07/30/19 15:41*	*07/31/19 18:25*	*1*
2-Fluorophenol	*99*		*31 - 166*	*07/30/19 15:41*	*07/31/19 18:25*	*1*
Nitrobenzene-d5	*92*		*37 - 147*	*07/30/19 15:41*	*07/31/19 18:25*	*1*
Phenol-d5	*110*		*30 - 153*	*07/30/19 15:41*	*07/31/19 18:25*	*1*
Terphenyl-d14	*103*		*42 - 157*	*07/30/19 15:41*	*07/31/19 18:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.88**	**J B**	1.2	0.23	mg/Kg	☼	07/27/19 16:37	08/01/19 11:09	1
Arsenic	**4.9**		0.58	0.20	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Barium	**47**		0.58	0.066	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Beryllium	**0.69**		0.23	0.054	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Boron	**15**		2.9	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Cadmium	**0.15**	**B**	0.12	0.021	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Calcium	**78000**	**B**	58	9.9	mg/Kg	☼	07/27/19 16:37	07/31/19 14:49	5
Chromium	**18**		0.58	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Cobalt	**11**		0.29	0.076	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Copper	**18**		0.58	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Iron	**16000**		12	6.0	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Lead	**9.9**		0.29	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Magnesium	**34000**		5.8	2.9	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Manganese	**420**		0.58	0.084	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Nickel	**27**		0.58	0.17	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Potassium	**3200**		29	10	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Selenium	**0.65**	**B**	0.58	0.34	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Silver	**2.2**		0.29	0.075	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Sodium	**200**		58	8.6	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Vanadium	**22**		0.29	0.069	mg/Kg	☼	07/27/19 16:37	07/31/19 02:31	1
Zinc	**44**		1.2	0.51	mg/Kg	☼	07/27/19 16:37	08/01/19 11:09	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		07/27/19 15:46	07/31/19 04:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:46	07/31/19 04:30	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B03-5

Date Collected: 07/24/19 10:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-7

Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/27/19 15:40	07/30/19 04:08	1
Barium	**0.086**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 04:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 04:08	1
Boron	**0.067**	**J**	0.10	0.050	mg/L		07/27/19 15:40	07/30/19 04:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 04:08	1
Calcium	**15**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:08	1
Chromium	**0.018**	**J**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:08	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:08	1
Iron	**10**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 04:08	1
Lead	**0.012**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 04:08	1
Manganese	**0.090**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:08	1
Nickel	**0.011**	**J ^**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:08	1
Potassium	**7.4**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:08	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 04:08	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:08	1
Zinc	**0.028**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 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		07/27/19 15:40	08/01/19 15:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 15:54	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		07/31/19 11:20	08/01/19 08:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.017	0.0058	mg/Kg	☼	08/02/19 13:00	08/05/19 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	08/06/19 15:45	08/07/19 11:00	1
pH	**8.2**		0.2	0.2	SU			07/30/19 13:58	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-1
Date Collected: 07/24/19 12:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-14
Matrix: Solid
Percent Solids: 86.2

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	☼	07/25/19 17:47	08/01/19 04:08	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Acetone	**0.0097**	**J**	0.015	0.0067	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00069	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/25/19 17:47*	*08/01/19 04:08*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*07/25/19 17:47*	*08/01/19 04:08*	*1*
Dibromofluoromethane	*108*		*75 - 126*	*07/25/19 17:47*	*08/01/19 04:08*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/25/19 17:47*	*08/01/19 04:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-1
Date Collected: 07/24/19 12:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-14
Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Bis(2-ethylhexyl) phthalate	**1.9**		0.19	0.070	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-1
Date Collected: 07/24/19 12:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-14
Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Naphthalene	**0.014**	**J**	0.038	0.0059	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	07/30/19 15:41	07/31/19 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*31 - 143*	*07/30/19 15:41*	*07/31/19 16:37*	*1*
2-Fluorobiphenyl	*99*		*43 - 145*	*07/30/19 15:41*	*07/31/19 16:37*	*1*
2-Fluorophenol	*99*		*31 - 166*	*07/30/19 15:41*	*07/31/19 16:37*	*1*
Nitrobenzene-d5	*94*		*37 - 147*	*07/30/19 15:41*	*07/31/19 16:37*	*1*
Phenol-d5	*106*		*30 - 153*	*07/30/19 15:41*	*07/31/19 16:37*	*1*
Terphenyl-d14	*107*		*42 - 157*	*07/30/19 15:41*	*07/31/19 16:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.64**	**J B**	1.1	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 11:46	1
Arsenic	**8.1**		0.57	0.20	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Barium	**36**		0.57	0.065	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Beryllium	**0.58**		0.23	0.054	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Boron	**12**		2.9	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Cadmium	**0.21**	**B**	0.11	0.021	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Calcium	**69000**	**B**	57	9.7	mg/Kg	☼	07/27/19 16:37	07/31/19 15:16	5
Chromium	**14**		0.57	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Cobalt	**10**		0.29	0.075	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Copper	**20**		0.57	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Iron	**20000**		11	6.0	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Lead	**11**		0.29	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Magnesium	**30000**		5.7	2.8	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Manganese	**460**		0.57	0.083	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Nickel	**27**		0.57	0.17	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Potassium	**2200**		29	10	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Silver	**2.2**		0.29	0.074	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Sodium	**910**		57	8.5	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Thallium	**0.55**	**J**	0.57	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Vanadium	**19**		0.29	0.068	mg/Kg	☼	07/27/19 16:37	07/31/19 03:00	1
Zinc	**49**		1.1	0.50	mg/Kg	☼	07/27/19 16:37	08/01/19 11:46	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		07/27/19 15:46	07/31/19 05:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:46	07/31/19 05:08	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 05:08	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:46	07/31/19 05:08	1

Client Sample ID: 1896V2-43-B05-1
Date Collected: 07/24/19 12:20
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-14
Matrix: Solid
Percent Solids: 86.2

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		07/27/19 15:46	07/31/19 05:08	1
Manganese	**0.27**		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 05:08	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:46	07/31/19 05:08	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		07/27/19 15:40	07/30/19 04:36	1
Barium	**0.46**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 04:36	1
Beryllium	**0.0056**		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 04:36	1
Boron	**0.21**		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 04:36	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 04:36	1
Calcium	**31**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:36	1
Chromium	**0.15**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:36	1
Cobalt	**0.047**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:36	1
Iron	**150**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 04:36	1
Lead	**0.077**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 04:36	1
Manganese	**0.57**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:36	1
Nickel	**0.18**		0.025	0.010	mg/L		07/27/19 15:40	07/31/19 01:16	1
Potassium	**37**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:36	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 04:36	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:36	1
Zinc	**0.49**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 04:36	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		07/27/19 15:46	08/02/19 20:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:40	08/01/19 16:03	1
Thallium	**0.0056**		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00034**		0.00033	0.00033	mg/L		07/31/19 11:20	08/01/19 09:03	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	☼	08/02/19 13:00	08/05/19 10:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.28	mg/Kg	☼	08/06/19 15:45	08/07/19 11:04	1
pH	**8.2**		0.2	0.2	SU			07/30/19 14:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-2
Date Collected: 07/24/19 12:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-15
Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Acetone	**0.026**		0.016	0.0070	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*07/25/19 17:47*	*08/01/19 04:33*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*07/25/19 17:47*	*08/01/19 04:33*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*07/25/19 17:47*	*08/01/19 04:33*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/25/19 17:47*	*08/01/19 04:33*	*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	☼	07/30/19 15:41	07/31/19 21:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-2
Date Collected: 07/24/19 12:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-15
Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2-Methylnaphthalene	**0.14**		0.077	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Bis(2-ethylhexyl) phthalate	**0.90**		0.19	0.070	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Fluoranthene	**0.0078**	**J**	0.038	0.0071	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-2
Date Collected: 07/24/19 12:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-15
Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Naphthalene	**0.040**		0.038	0.0059	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Phenanthrene	**0.11**		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	07/30/19 15:41	07/31/19 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*101*		*31 - 143*	*07/30/19 15:41*	*07/31/19 21:06*	*1*
2-Fluorobiphenyl	*103*		*43 - 145*	*07/30/19 15:41*	*07/31/19 21:06*	*1*
2-Fluorophenol	*106*		*31 - 166*	*07/30/19 15:41*	*07/31/19 21:06*	*1*
Nitrobenzene-d5	*97*		*37 - 147*	*07/30/19 15:41*	*07/31/19 21:06*	*1*
Phenol-d5	*115*		*30 - 153*	*07/30/19 15:41*	*07/31/19 21:06*	*1*
Terphenyl-d14	*117*		*42 - 157*	*07/30/19 15:41*	*07/31/19 21:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.52**	**J B**	1.1	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 11:50	1
Arsenic	**5.8**		0.56	0.19	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Barium	**32**		0.56	0.064	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Beryllium	**0.60**		0.22	0.052	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Boron	**13**		2.8	0.26	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Cadmium	**0.16**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Calcium	**69000**	**B**	56	9.5	mg/Kg	☼	07/27/19 16:37	07/31/19 15:20	5
Chromium	**15**		0.56	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Cobalt	**11**		0.28	0.073	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Copper	**20**		0.56	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Iron	**16000**		11	5.8	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Lead	**11**		0.28	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Magnesium	**32000**		5.6	2.8	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Manganese	**440**		0.56	0.081	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Nickel	**28**		0.56	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Potassium	**2700**		28	9.9	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Selenium	**0.42**	**J B**	0.56	0.33	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Silver	**2.0**		0.28	0.072	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Sodium	**160**		56	8.3	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Thallium	**0.53**	**J**	0.56	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Vanadium	**18**		0.28	0.066	mg/Kg	☼	07/27/19 16:37	07/31/19 03:04	1
Zinc	**45**		1.1	0.49	mg/Kg	☼	07/27/19 16:37	08/01/19 11:50	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		07/27/19 15:40	07/30/19 04:48	1
Barium	<0.50		0.50	0.050	mg/L		07/27/19 15:40	07/30/19 04:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 04:48	1
Boron	<0.10		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 04:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-2
Date Collected: 07/24/19 12:25
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-15
Matrix: Solid
Percent Solids: 86.6

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		07/27/19 15:40	07/30/19 04:48	1
Calcium	**14**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:48	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:48	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:48	1
Iron	**1.7**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 04:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 04:48	1
Manganese	**0.025**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:48	1
Nickel	<0.025	^	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:48	1
Potassium	**2.5**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:48	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 04:48	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:48	1
Zinc	<0.50	^	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 04:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:40	08/01/19 16:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 16:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/31/19 11:20	08/01/19 09:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.018	0.0059	mg/Kg	☼	08/02/19 13:00	08/05/19 10:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.41		0.41	0.21	mg/Kg	☼	08/06/19 15:45	08/07/19 11:06	1
pH	**7.9**		0.2	0.2	SU			07/30/19 14:23	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-3
Date Collected: 07/24/19 12:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-16
Matrix: Solid
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	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Acetone	**0.0078**	**J**	0.015	0.0067	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Bromomethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 04:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/25/19 17:47*	*08/01/19 04:59*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*	*07/25/19 17:47*	*08/01/19 04:59*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*07/25/19 17:47*	*08/01/19 04:59*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*07/25/19 17:47*	*08/01/19 04:59*	*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	☼	07/30/19 15:41	08/02/19 20:10	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1

Client Sample ID: 1896V2-43-B05-3
Date Collected: 07/24/19 12:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-16
Matrix: Solid
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	☼	07/30/19 15:41	08/02/19 20:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2-Methylnaphthalene	**0.040**	**J**	0.077	0.0070	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Benzo[a]pyrene	**0.0087**	**J**	0.038	0.0074	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Benzo[g,h,i]perylene	**0.018**	**J**	0.038	0.012	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Bis(2-ethylhexyl) phthalate	**0.73**		0.19	0.070	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Chrysene	**0.029**	**J**	0.038	0.010	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1

Client Sample ID: 1896V2-43-B05-3
Date Collected: 07/24/19 12:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-16
Matrix: Solid
Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Naphthalene	**0.047**		0.038	0.0059	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Phenanthrene	**0.084**		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	07/30/19 15:41	08/02/19 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*104*		*31 - 143*	*07/30/19 15:41*	*08/02/19 20:10*	*1*
2-Fluorobiphenyl	*98*		*43 - 145*	*07/30/19 15:41*	*08/02/19 20:10*	*1*
2-Fluorophenol	*87*		*31 - 166*	*07/30/19 15:41*	*08/02/19 20:10*	*1*
Nitrobenzene-d5	*84*		*37 - 147*	*07/30/19 15:41*	*08/02/19 20:10*	*1*
Phenol-d5	*80*		*30 - 153*	*07/30/19 15:41*	*08/02/19 20:10*	*1*
Terphenyl-d14	*124*		*42 - 157*	*07/30/19 15:41*	*08/02/19 20:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.71**	**J B**	1.1	0.21	mg/Kg	☼	07/27/19 16:37	08/01/19 11:54	1
Arsenic	**5.5**		0.55	0.19	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Barium	**40**		0.55	0.063	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Beryllium	**0.65**		0.22	0.052	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Boron	**15**		2.8	0.26	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Cadmium	**0.17**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Calcium	**68000**	**B**	55	9.4	mg/Kg	☼	07/27/19 16:37	07/31/19 15:24	5
Chromium	**17**		0.55	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Cobalt	**12**		0.28	0.072	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Copper	**20**		0.55	0.15	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Iron	**17000**		11	5.7	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Lead	**11**		0.28	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Magnesium	**30000**		5.5	2.7	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Manganese	**390**		0.55	0.080	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Nickel	**30**		0.55	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Potassium	**3100**		28	9.8	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Selenium	**0.35**	**J B**	0.55	0.32	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Silver	**2.1**		0.28	0.071	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Sodium	**170**		55	8.2	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Thallium	**0.69**		0.55	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Vanadium	**20**		0.28	0.065	mg/Kg	☼	07/27/19 16:37	07/31/19 03:16	1
Zinc	**47**		1.1	0.49	mg/Kg	☼	07/27/19 16:37	08/01/19 11:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/27/19 15:40	07/30/19 04:53	1
Barium	**0.050**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 04:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 04:53	1
Boron	**0.062**	**J**	0.10	0.050	mg/L		07/27/19 15:40	07/30/19 04:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-3
Date Collected: 07/24/19 12:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-16
Matrix: Solid
Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 04:53	1
Calcium	**14**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:53	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:53	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:53	1
Iron	**3.9**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 04:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 04:53	1
Manganese	**0.038**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:53	1
Nickel	<0.025	^	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:53	1
Potassium	**4.1**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:53	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 04:53	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:53	1
Zinc	**0.16**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 04:53	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		07/27/19 15:40	08/01/19 16:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 16:05	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		07/31/19 11:20	08/01/19 09:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.019	0.0062	mg/Kg	☼	08/02/19 13:00	08/05/19 10:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	08/06/19 15:45	08/07/19 11:07	1
pH	**8.0**		0.2	0.2	SU			07/30/19 14:26	1

Client Sample ID: 1896V2-43-B05-4
Date Collected: 07/24/19 12:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-17
Matrix: Solid
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	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Acetone	**0.016**		0.016	0.0070	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/25/19 17:47*	*08/01/19 05:24*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/25/19 17:47*	*08/01/19 05:24*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*07/25/19 17:47*	*08/01/19 05:24*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*07/25/19 17:47*	*08/01/19 05:24*	*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	☼	07/30/19 15:41	07/31/19 22:00	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1

Client Sample ID: 1896V2-43-B05-4
Date Collected: 07/24/19 12:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-17
Matrix: Solid
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	0.086	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2-Methylnaphthalene	**0.040**	**J**	0.076	0.0069	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Bis(2-ethylhexyl) phthalate	**0.74**		0.19	0.069	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1

Client Sample ID: 1896V2-43-B05-4

Date Collected: 07/24/19 12:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-17

Matrix: Solid
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	<0.038		0.038	0.0098	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Phenanthrene	**0.055**		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/30/19 15:41	07/31/19 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*112*		*31 - 143*	*07/30/19 15:41*	*07/31/19 22:00*	*1*
2-Fluorobiphenyl	*103*		*43 - 145*	*07/30/19 15:41*	*07/31/19 22:00*	*1*
2-Fluorophenol	*98*		*31 - 166*	*07/30/19 15:41*	*07/31/19 22:00*	*1*
Nitrobenzene-d5	*89*		*37 - 147*	*07/30/19 15:41*	*07/31/19 22:00*	*1*
Phenol-d5	*112*		*30 - 153*	*07/30/19 15:41*	*07/31/19 22:00*	*1*
Terphenyl-d14	*118*		*42 - 157*	*07/30/19 15:41*	*07/31/19 22:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.68**	**J B**	1.1	0.22	mg/Kg	☼	07/27/19 16:37	08/01/19 11:58	1
Arsenic	**4.7**		0.57	0.20	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Barium	**43**		0.57	0.065	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Beryllium	**0.65**		0.23	0.053	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Boron	**15**		2.9	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Cadmium	**0.15**	**B**	0.11	0.021	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Calcium	**71000**	**B**	57	9.7	mg/Kg	☼	07/27/19 16:37	07/31/19 15:36	5
Chromium	**17**		0.57	0.28	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Cobalt	**11**		0.29	0.075	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Copper	**17**		0.57	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Iron	**16000**		11	6.0	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Lead	**9.5**		0.29	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Magnesium	**32000**		5.7	2.8	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Manganese	**400**		0.57	0.083	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Nickel	**28**		0.57	0.17	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Potassium	**3200**		29	10	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Selenium	**0.37**	**J B**	0.57	0.34	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Silver	**2.2**		0.29	0.074	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Sodium	**210**		57	8.5	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Thallium	**0.33**	**J**	0.57	0.29	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Vanadium	**21**		0.29	0.068	mg/Kg	☼	07/27/19 16:37	07/31/19 03:21	1
Zinc	**45**		1.1	0.50	mg/Kg	☼	07/27/19 16:37	08/01/19 11:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:46	07/31/19 05:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:46	07/31/19 05:21	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-4

Date Collected: 07/24/19 12:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-17

Matrix: Solid
Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/27/19 15:40	07/30/19 04:57	1
Barium	**0.075**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 04:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 04:57	1
Boron	**0.058**	**J**	0.10	0.050	mg/L		07/27/19 15:40	07/30/19 04:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 04:57	1
Calcium	**15**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:57	1
Chromium	**0.017**	**J**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:57	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:57	1
Iron	**8.8**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 04:57	1
Lead	**0.0098**		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 04:57	1
Manganese	**0.083**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:57	1
Nickel	**0.010**	**J ^**	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:57	1
Potassium	**6.8**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 04:57	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 04:57	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 04:57	1
Zinc	**0.023**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 04:57	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		07/27/19 15:40	08/01/19 16:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 16:06	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		07/31/19 11:20	08/01/19 09:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.019	0.0062	mg/Kg	☼	08/02/19 13:00	08/05/19 10:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.29	mg/Kg	☼	08/06/19 15:45	08/07/19 11:08	1
pH	**8.0**		0.2	0.2	SU			07/30/19 14:31	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-5
Date Collected: 07/24/19 12:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-18
Matrix: Solid
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	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Acetone	**0.014**	**J**	0.015	0.0065	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 05:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/25/19 17:47*	*08/01/19 05:49*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*07/25/19 17:47*	*08/01/19 05:49*	*1*
Dibromofluoromethane	*114*		*75 - 126*	*07/25/19 17:47*	*08/01/19 05:49*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*07/25/19 17:47*	*08/01/19 05:49*	*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	☼	07/30/19 15:41	07/31/19 18:47	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1

Client Sample ID: 1896V2-43-B05-5
Date Collected: 07/24/19 12:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-18
Matrix: Solid
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	0.086	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2-Methylnaphthalene	**0.045**	**J**	0.076	0.0069	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Benzo[b]fluoranthene	<0.038		0.038	0.0081	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Benzo[g,h,i]perylene	**0.015**	**J**	0.038	0.012	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Bis(2-ethylhexyl) phthalate	**0.95**		0.19	0.069	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-5
Date Collected: 07/24/19 12:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-18
Matrix: Solid
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	<0.038		0.038	0.0098	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Naphthalene	**0.022**	**J**	0.038	0.0058	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Phenanthrene	**0.056**		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1
Pyrene	**0.017**	**J**	0.038	0.0075	mg/Kg	☼	07/30/19 15:41	07/31/19 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*31 - 143*	*07/30/19 15:41*	*07/31/19 18:47*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*07/30/19 15:41*	*07/31/19 18:47*	*1*
2-Fluorophenol	*95*		*31 - 166*	*07/30/19 15:41*	*07/31/19 18:47*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*07/30/19 15:41*	*07/31/19 18:47*	*1*
Phenol-d5	*91*		*30 - 153*	*07/30/19 15:41*	*07/31/19 18:47*	*1*
Terphenyl-d14	*126*		*42 - 157*	*07/30/19 15:41*	*07/31/19 18:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.50**	**J B**	1.1	0.21	mg/Kg	☼	07/27/19 16:37	08/01/19 12:10	1
Arsenic	**5.3**		0.54	0.18	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Barium	**39**		0.54	0.061	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Beryllium	**0.60**		0.21	0.050	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Boron	**13**		2.7	0.25	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Cadmium	**0.15**	**B**	0.11	0.019	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Calcium	**73000**	**B**	54	9.1	mg/Kg	☼	07/27/19 16:37	07/31/19 15:40	5
Chromium	**16**		0.54	0.26	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Cobalt	**11**		0.27	0.070	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Copper	**19**		0.54	0.15	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Iron	**15000**		11	5.6	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Lead	**10**		0.27	0.12	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Magnesium	**38000**		27	13	mg/Kg	☼	07/27/19 16:37	07/31/19 15:40	5
Manganese	**390**		0.54	0.078	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Nickel	**27**		0.54	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Potassium	**2800**		27	9.5	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Selenium	<0.54		0.54	0.31	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Silver	**2.0**		0.27	0.069	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Sodium	**260**		54	7.9	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Thallium	**0.41**	**J**	0.54	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Vanadium	**19**		0.27	0.063	mg/Kg	☼	07/27/19 16:37	07/31/19 03:25	1
Zinc	**44**		1.1	0.47	mg/Kg	☼	07/27/19 16:37	08/01/19 12:10	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		07/27/19 15:40	07/30/19 05:01	1
Barium	**0.055**	**J**	0.50	0.050	mg/L		07/27/19 15:40	07/30/19 05:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:40	07/30/19 05:01	1
Boron	<0.10		0.10	0.050	mg/L		07/27/19 15:40	07/30/19 05:01	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B05-5
Date Collected: 07/24/19 12:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-18
Matrix: Solid
Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:40	07/30/19 05:01	1
Calcium	**13**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 05:01	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 05:01	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 05:01	1
Iron	**4.5**		0.40	0.20	mg/L		07/27/19 15:40	07/30/19 05:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:40	07/30/19 05:01	1
Manganese	**0.040**		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 05:01	1
Nickel	<0.025	^	0.025	0.010	mg/L		07/27/19 15:40	07/30/19 05:01	1
Potassium	**4.3**		2.5	0.50	mg/L		07/27/19 15:40	07/30/19 05:01	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:40	07/30/19 05:01	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:40	07/30/19 05:01	1
Zinc	**0.15**	**J ^**	0.50	0.020	mg/L		07/27/19 15:40	07/30/19 05:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:40	08/01/19 16:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:40	08/01/19 16:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/31/19 11:20	08/01/19 09:09	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	☼	08/02/19 13:00	08/05/19 10:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.28	mg/Kg	☼	08/06/19 15:45	08/07/19 11:08	1
pH	**8.2**		0.2	0.2	SU			07/30/19 14:33	1

Client Sample ID: 1896V2-43-B06-1
Date Collected: 07/24/19 09:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-19
Matrix: Solid
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	<0.0014		0.0014	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Acetone	**0.0094**	**J**	0.014	0.0063	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*07/25/19 17:47*	*08/01/19 06:15*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 131*	*07/25/19 17:47*	*08/01/19 06:15*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*07/25/19 17:47*	*08/01/19 06:15*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*07/25/19 17:47*	*08/01/19 06:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-1
Date Collected: 07/24/19 09:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-19
Matrix: Solid
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	<0.38		0.38	0.088	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1

Client Sample ID: 1896V2-43-B06-1
Date Collected: 07/24/19 09:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-19
Matrix: Solid
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	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Naphthalene	**0.0086**	**J**	0.038	0.0059	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1
Pyrene	**0.0079**	**J**	0.038	0.0077	mg/Kg	☼	07/30/19 15:41	07/31/19 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*52*		*31 - 143*	*07/30/19 15:41*	*07/31/19 19:17*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*07/30/19 15:41*	*07/31/19 19:17*	*1*
2-Fluorophenol	*99*		*31 - 166*	*07/30/19 15:41*	*07/31/19 19:17*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*07/30/19 15:41*	*07/31/19 19:17*	*1*
Phenol-d5	*95*		*30 - 153*	*07/30/19 15:41*	*07/31/19 19:17*	*1*
Terphenyl-d14	*130*		*42 - 157*	*07/30/19 15:41*	*07/31/19 19:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.70**	**J B**	1.1	0.21	mg/Kg	☼	07/27/19 16:37	08/01/19 12:14	1
Arsenic	**8.3**		0.54	0.18	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Barium	**30**		0.54	0.061	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Beryllium	**0.55**		0.22	0.050	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Boron	**12**		2.7	0.25	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Cadmium	**0.20**	**B**	0.11	0.019	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Calcium	**69000**	**B**	54	9.1	mg/Kg	☼	07/27/19 16:37	07/31/19 15:44	5
Chromium	**14**		0.54	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Cobalt	**17**		0.27	0.070	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Copper	**26**		0.54	0.15	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Iron	**18000**		11	5.6	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Lead	**16**		0.27	0.12	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Magnesium	**32000**		5.4	2.7	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Manganese	**580**		0.54	0.078	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Nickel	**33**		0.54	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Potassium	**2500**		27	9.5	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Selenium	**0.40**	**J B**	0.54	0.32	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Silver	**2.2**		0.27	0.069	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Sodium	**180**		54	8.0	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Thallium	**0.58**		0.54	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Vanadium	**19**		0.27	0.063	mg/Kg	☼	07/27/19 16:37	07/31/19 03:29	1
Zinc	**53**		1.1	0.47	mg/Kg	☼	07/27/19 16:37	08/01/19 12:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:47	07/29/19 15:15	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:15	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:47	07/29/19 15:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:47	07/29/19 15:15	1

Client Sample ID: 1896V2-43-B06-1

Date Collected: 07/24/19 09:30
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-19

Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.85**		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:15	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:15	1

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		07/27/19 15:41	07/29/19 16:01	1
Barium	**0.31**	**J**	0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:01	1
Beryllium	**0.0050**		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:01	1
Boron	**0.19**		0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:41	07/29/19 16:01	1
Calcium	**29**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:01	1
Chromium	**0.11**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:01	1
Cobalt	**0.039**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:01	1
Iron	**110**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:01	1
Lead	**0.055**		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:01	1
Manganese	**0.53**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:01	1
Nickel	**0.15**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:01	1
Potassium	**34**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:01	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:01	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:01	1
Zinc	**0.33**	**J**	0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:01	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		07/27/19 15:47	08/02/19 20:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:41	08/01/19 15:30	1
Thallium	**0.0047**		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:30	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		07/30/19 10:05	07/31/19 08:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0060	mg/Kg	☼	08/02/19 13:00	08/05/19 10:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	08/06/19 15:45	08/07/19 11:09	1
pH	**8.5**		0.2	0.2	SU			07/30/19 14:36	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-2
Date Collected: 07/24/19 09:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-20
Matrix: Solid
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	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Acetone	**0.011**	**J**	0.015	0.0065	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/25/19 17:47*	*08/01/19 06:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/25/19 17:47*	*08/01/19 06:40*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*07/25/19 17:47*	*08/01/19 06:40*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*07/25/19 17:47*	*08/01/19 06:40*	*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	☼	07/30/19 15:41	07/31/19 19:46	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-2
Date Collected: 07/24/19 09:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-20
Matrix: Solid
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	0.086	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2-Methylnaphthalene	**0.040**	**J**	0.076	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Benzo[g,h,i]perylene	**0.015**	**J**	0.038	0.012	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Chrysene	**0.032**	**J**	0.038	0.010	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1

Client Sample ID: 1896V2-43-B06-2
Date Collected: 07/24/19 09:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-20
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Phenanthrene	**0.067**		0.038	0.0053	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/30/19 15:41	07/31/19 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*72*		*31 - 143*	*07/30/19 15:41*	*07/31/19 19:46*	*1*
2-Fluorobiphenyl	*102*		*43 - 145*	*07/30/19 15:41*	*07/31/19 19:46*	*1*
2-Fluorophenol	*109*		*31 - 166*	*07/30/19 15:41*	*07/31/19 19:46*	*1*
Nitrobenzene-d5	*84*		*37 - 147*	*07/30/19 15:41*	*07/31/19 19:46*	*1*
Phenol-d5	*105*		*30 - 153*	*07/30/19 15:41*	*07/31/19 19:46*	*1*
Terphenyl-d14	*158*	*X*	*42 - 157*	*07/30/19 15:41*	*07/31/19 19:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.51**	**J B**	1.1	0.21	mg/Kg	☼	07/27/19 16:37	08/01/19 12:18	1
Arsenic	**5.9**		0.54	0.19	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Barium	**34**		0.54	0.062	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Beryllium	**0.64**		0.22	0.051	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Boron	**12**		2.7	0.25	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Cadmium	**0.20**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Calcium	**71000**	**B**	54	9.2	mg/Kg	☼	07/27/19 16:37	07/31/19 15:48	5
Chromium	**16**		0.54	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Cobalt	**13**		0.27	0.071	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Copper	**21**		0.54	0.15	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Iron	**16000**		11	5.7	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Lead	**11**		0.27	0.13	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Magnesium	**31000**		5.4	2.7	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Manganese	**430**		0.54	0.079	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Nickel	**30**		0.54	0.16	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Potassium	**2800**		27	9.6	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Selenium	**0.43**	**J B**	0.54	0.32	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Silver	**2.0**		0.27	0.070	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Sodium	**170**		54	8.1	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Thallium	**0.51**	**J**	0.54	0.27	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Vanadium	**19**		0.27	0.064	mg/Kg	☼	07/27/19 16:37	07/31/19 03:33	1
Zinc	**52**		1.1	0.48	mg/Kg	☼	07/27/19 16:37	08/01/19 12:18	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		07/27/19 15:47	07/29/19 15:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:47	07/29/19 15:20	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-2

Date Collected: 07/24/19 09:35
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-20

Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/27/19 15:41	07/29/19 16:05	1
Barium	**0.083**	**J**	0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:05	1
Boron	**0.075**	**J**	0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:41	07/29/19 16:05	1
Calcium	**17**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:05	1
Chromium	**0.022**	**J**	0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:05	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:05	1
Iron	**11**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:05	1
Lead	**0.011**		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:05	1
Manganese	**0.12**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:05	1
Nickel	**0.015**	**J**	0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:05	1
Potassium	**9.4**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:05	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:05	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:05	1
Zinc	**0.028**	**J**	0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:41	08/01/19 15:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:31	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		07/30/19 10:05	07/31/19 08:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.019	0.0064	mg/Kg	☼	08/02/19 13:00	08/05/19 10:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.29	mg/Kg	☼	08/06/19 15:45	08/07/19 11:10	1
pH	**8.1**		0.2	0.2	SU			07/30/19 14:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-2 Dup

Date Collected: 07/24/19 09:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-21

Matrix: Solid
Percent Solids: 86.2

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	☼	07/25/19 17:47	08/01/19 07:06	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Acetone	**0.019**		0.015	0.0065	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 07:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*07/25/19 17:47*	*08/01/19 07:06*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/25/19 17:47*	*08/01/19 07:06*	*1*
Dibromofluoromethane	*109*		*75 - 126*	*07/25/19 17:47*	*08/01/19 07:06*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*07/25/19 17:47*	*08/01/19 07:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1

Client Sample ID: 1896V2-43-B06-2 Dup
Date Collected: 07/24/19 09:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-21
Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2,4-Dinitrophenol	<0.75	F2	0.75	0.66	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2-Methylnaphthalene	**0.051**	**J**	0.075	0.0069	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
4,6-Dinitro-2-methylphenol	<0.75	F2	0.75	0.30	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
4-Nitrophenol	<0.75	*	0.75	0.36	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Anthracene	<0.037	*	0.037	0.0062	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Chrysene	**0.018**	**J**	0.037	0.010	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Hexachlorocyclopentadiene	<0.75	F1	0.75	0.21	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Hexachloroethane	<0.19	F1	0.19	0.057	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1

Client Sample ID: 1896V2-43-B06-2 Dup

Date Collected: 07/24/19 09:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-21

Matrix: Solid
Percent Solids: 86.2

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	<0.037		0.037	0.0097	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Naphthalene	**0.020**	**J**	0.037	0.0058	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Phenanthrene	**0.039**		0.037	0.0052	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	07/30/19 07:55	07/31/19 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*67*		*31 - 143*	*07/30/19 07:55*	*07/31/19 12:23*	*1*
2-Fluorobiphenyl	*93*		*43 - 145*	*07/30/19 07:55*	*07/31/19 12:23*	*1*
2-Fluorophenol	*106*		*31 - 166*	*07/30/19 07:55*	*07/31/19 12:23*	*1*
Nitrobenzene-d5	*80*		*37 - 147*	*07/30/19 07:55*	*07/31/19 12:23*	*1*
Phenol-d5	*98*		*30 - 153*	*07/30/19 07:55*	*07/31/19 12:23*	*1*
Terphenyl-d14	*131*		*42 - 157*	*07/30/19 07:55*	*07/31/19 12:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.39**	**J**	1.2	0.22	mg/Kg	☼	07/27/19 16:42	07/30/19 15:39	1
Arsenic	**7.6**		0.58	0.20	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Barium	**33**		0.58	0.066	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Beryllium	**0.58**		0.23	0.054	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Boron	**13**		2.9	0.27	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Cadmium	**0.15**	**B**	0.12	0.021	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Calcium	**79000**	**B**	58	9.8	mg/Kg	☼	07/27/19 16:42	07/30/19 15:52	5
Chromium	**15**		0.58	0.29	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Cobalt	**13**		0.29	0.076	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Copper	**21**		0.58	0.16	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Iron	**17000**		12	6.0	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Lead	**11**		0.29	0.13	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Magnesium	**32000**		5.8	2.9	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Manganese	**470**		0.58	0.084	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Nickel	**31**		0.58	0.17	mg/Kg	☼	07/27/19 16:42	07/30/19 15:39	1
Potassium	**2900**		29	10	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Silver	**2.0**		0.29	0.075	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Sodium	**180**		58	8.6	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Thallium	**0.91**		0.58	0.29	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Vanadium	**19**		0.29	0.068	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	1
Zinc	**46**		1.2	0.51	mg/Kg	☼	07/27/19 16:42	07/29/19 23:49	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		07/27/19 15:47	07/29/19 15:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:47	07/29/19 15:32	1
Manganese	**1.9**		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:32	1

Client Sample ID: 1896V2-43-B06-2 Dup

Date Collected: 07/24/19 09:40
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-21

Matrix: Solid
Percent Solids: 86.2

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		07/27/19 15:41	07/29/19 16:17	1
Barium	**0.15**	**J**	0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:17	1
Boron	**0.095**	**J**	0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:17	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:41	07/29/19 16:17	1
Calcium	**26**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:17	1
Chromium	**0.045**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:17	1
Cobalt	**0.016**	**J**	0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:17	1
Iron	**25**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:17	1
Lead	**0.025**		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:17	1
Manganese	**0.29**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:17	1
Nickel	**0.085**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:17	1
Potassium	**17**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:17	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:17	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:17	1
Zinc	**0.096**	**J**	0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:17	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		07/27/19 15:41	08/01/19 15:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:32	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		07/30/19 10:05	07/31/19 08:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.018	0.0060	mg/Kg	☼	08/02/19 13:00	08/05/19 10:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.24	mg/Kg	☼	08/07/19 10:10	08/07/19 15:00	1
pH	**8.1**		0.2	0.2	SU			07/30/19 14:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-3
Date Collected: 07/24/19 09:45
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-22
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Acetone	**0.013**	**J**	0.014	0.0063	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/25/19 17:47*	*08/01/19 07:31*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/25/19 17:47*	*08/01/19 07:31*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*07/25/19 17:47*	*08/01/19 07:31*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*07/25/19 17:47*	*08/01/19 07:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1

Client Sample ID: 1896V2-43-B06-3
Date Collected: 07/24/19 09:45
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-22
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2-Methylnaphthalene	**0.14**		0.078	0.0071	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
4-Nitrophenol	<0.78	*	0.78	0.37	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Anthracene	<0.038	*	0.038	0.0064	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.038	0.012	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Chrysene	**0.014**	**J**	0.038	0.011	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-3
Date Collected: 07/24/19 09:45
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-22
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Naphthalene	**0.052**		0.038	0.0059	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Phenanthrene	**0.069**		0.038	0.0054	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	07/30/19 07:55	07/31/19 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*31 - 143*	*07/30/19 07:55*	*07/31/19 12:52*	*1*
2-Fluorobiphenyl	*91*		*43 - 145*	*07/30/19 07:55*	*07/31/19 12:52*	*1*
2-Fluorophenol	*104*		*31 - 166*	*07/30/19 07:55*	*07/31/19 12:52*	*1*
Nitrobenzene-d5	*79*		*37 - 147*	*07/30/19 07:55*	*07/31/19 12:52*	*1*
Phenol-d5	*97*		*30 - 153*	*07/30/19 07:55*	*07/31/19 12:52*	*1*
Terphenyl-d14	*137*		*42 - 157*	*07/30/19 07:55*	*07/31/19 12:52*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.39**	**J**	1.2	0.22	mg/Kg	☼	07/27/19 16:42	07/30/19 15:55	1
Arsenic	**7.0**		0.58	0.20	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Barium	**33**		0.58	0.066	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Beryllium	**0.57**		0.23	0.054	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Boron	**12**		2.9	0.27	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Cadmium	**0.18**	**B**	0.12	0.021	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Calcium	**74000**	**B**	58	9.8	mg/Kg	☼	07/27/19 16:42	07/30/19 16:00	5
Chromium	**14**		0.58	0.29	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Cobalt	**12**		0.29	0.076	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Copper	**22**		0.58	0.16	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Iron	**17000**		12	6.0	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Lead	**11**		0.29	0.13	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Magnesium	**34000**		5.8	2.9	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Manganese	**500**		0.58	0.084	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Nickel	**29**		0.58	0.17	mg/Kg	☼	07/27/19 16:42	07/30/19 15:55	1
Potassium	**2500**		29	10	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Silver	**1.8**		0.29	0.075	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Sodium	**170**		58	8.6	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Thallium	**0.56**	**J**	0.58	0.29	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Vanadium	**17**		0.29	0.068	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1
Zinc	**51**		1.2	0.51	mg/Kg	☼	07/27/19 16:42	07/29/19 23:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/27/19 15:41	07/29/19 16:21	1
Barium	<0.50		0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:21	1
Boron	<0.10		0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-3
Date Collected: 07/24/19 09:45
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-22
Matrix: Solid
Percent Solids: 85.4

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		07/27/19 15:41	07/29/19 16:21	1
Calcium	**13**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:21	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:21	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:21	1
Iron	**4.2**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:21	1
Manganese	**0.046**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:21	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:21	1
Potassium	**5.0**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:21	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:21	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:21	1
Zinc	**0.11**	**J**	0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:41	08/01/19 15:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/30/19 10:05	07/31/19 08:28	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	☼	08/02/19 13:00	08/05/19 10:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.23	mg/Kg	☼	08/07/19 10:10	08/07/19 15:00	1
pH	**8.1**		0.2	0.2	SU			07/30/19 14:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-4
Date Collected: 07/24/19 09:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-24
Matrix: Solid
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	☼	07/25/19 17:47	08/01/19 13:52	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Acetone	**0.012**	**J**	0.015	0.0066	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 134*	*07/25/19 17:47*	*08/01/19 13:52*	*1*
4-Bromofluorobenzene (Surr)	*89*		*75 - 131*	*07/25/19 17:47*	*08/01/19 13:52*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*07/25/19 17:47*	*08/01/19 13:52*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*07/25/19 17:47*	*08/01/19 13:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1

Client Sample ID: 1896V2-43-B06-4
Date Collected: 07/24/19 09:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-24
Matrix: Solid
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	0.085	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2-Methylnaphthalene	**0.097**		0.075	0.0069	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
4-Nitrophenol	<0.75	*	0.75	0.36	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Anthracene	<0.037	*	0.037	0.0063	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.037	0.012	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Chrysene	**0.013**	**J**	0.037	0.010	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1

Client Sample ID: 1896V2-43-B06-4

Date Collected: 07/24/19 09:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-24

Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Naphthalene	**0.040**		0.037	0.0058	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Phenanthrene	**0.055**		0.037	0.0052	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1
Pyrene	**0.016**	**J**	0.037	0.0074	mg/Kg	☼	07/30/19 07:55	07/31/19 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*67*		*31 - 143*	*07/30/19 07:55*	*07/31/19 13:22*	*1*
2-Fluorobiphenyl	*98*		*43 - 145*	*07/30/19 07:55*	*07/31/19 13:22*	*1*
2-Fluorophenol	*107*		*31 - 166*	*07/30/19 07:55*	*07/31/19 13:22*	*1*
Nitrobenzene-d5	*81*		*37 - 147*	*07/30/19 07:55*	*07/31/19 13:22*	*1*
Phenol-d5	*101*		*30 - 153*	*07/30/19 07:55*	*07/31/19 13:22*	*1*
Terphenyl-d14	*141*		*42 - 157*	*07/30/19 07:55*	*07/31/19 13:22*	*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	☼	07/27/19 16:42	07/30/19 16:04	1
Arsenic	**6.2**		0.59	0.20	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Barium	**44**		0.59	0.067	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Beryllium	**0.64**		0.24	0.055	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Boron	**15**		2.9	0.27	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Cadmium	**0.20**	**B**	0.12	0.021	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Calcium	**71000**	**B**	59	10	mg/Kg	☼	07/27/19 16:42	07/30/19 16:08	5
Chromium	**17**		0.59	0.29	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Cobalt	**12**		0.29	0.077	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Copper	**23**		0.59	0.16	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Iron	**18000**		12	6.1	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Lead	**11**		0.29	0.14	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Magnesium	**32000**		5.9	2.9	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Manganese	**420**		0.59	0.085	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Nickel	**29**		0.59	0.17	mg/Kg	☼	07/27/19 16:42	07/30/19 16:04	1
Potassium	**3200**		29	10	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Selenium	**0.46**	**J**	0.59	0.35	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Silver	**2.2**		0.29	0.076	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Sodium	**250**		59	8.7	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Thallium	**0.69**		0.59	0.29	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Vanadium	**20**		0.29	0.070	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	1
Zinc	**53**		1.2	0.52	mg/Kg	☼	07/27/19 16:42	07/29/19 23:58	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		07/27/19 15:41	07/29/19 16:25	1
Barium	**0.050**	**J**	0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:25	1
Boron	<0.10		0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:25	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-4
Date Collected: 07/24/19 09:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-24
Matrix: Solid
Percent Solids: 84.6

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		07/27/19 15:41	07/29/19 16:25	1
Calcium	**13**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:25	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:25	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:25	1
Iron	**3.9**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:25	1
Manganese	**0.038**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:25	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:25	1
Potassium	**4.3**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:25	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:25	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:25	1
Zinc	<0.50		0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:41	08/01/19 15:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:36	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		07/30/19 10:05	07/31/19 08:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.018	0.0061	mg/Kg	☼	08/02/19 13:00	08/05/19 10:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.25	mg/Kg	☼	08/07/19 10:10	08/07/19 15:00	1
pH	**8.2**		0.2	0.2	SU			07/30/19 14:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-5
Date Collected: 07/24/19 09:55
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-25
Matrix: Solid
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	<0.0014		0.0014	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00060	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
1,1-Dichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
1,2-Dichloropropane	<0.0014		0.0014	0.00036	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
2-Butanone (MEK)	<0.0035		0.0035	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Acetone	**0.0077**	**J**	0.014	0.0060	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Benzene	<0.0014		0.0014	0.00035	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Bromodichloromethane	<0.0014		0.0014	0.00028	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Carbon disulfide	<0.0035		0.0035	0.00072	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Carbon tetrachloride	<0.0014		0.0014	0.00040	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Chlorobenzene	<0.0014		0.0014	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Chloroform	<0.0014		0.0014	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00039	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Dibromochloromethane	<0.0014		0.0014	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Ethylbenzene	<0.0014		0.0014	0.00066	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Styrene	<0.0014		0.0014	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Tetrachloroethene	<0.0014		0.0014	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Toluene	<0.0014		0.0014	0.00035	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00062	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00049	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Trichloroethene	<0.0014		0.0014	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Vinyl chloride	<0.0014		0.0014	0.00061	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1
Xylenes, Total	<0.0028		0.0028	0.00044	mg/Kg	☼	07/25/19 17:47	08/01/19 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*07/25/19 17:47*	*08/01/19 14:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*07/25/19 17:47*	*08/01/19 14:18*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*07/25/19 17:47*	*08/01/19 14:18*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*07/25/19 17:47*	*08/01/19 14:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1

Client Sample ID: 1896V2-43-B06-5
Date Collected: 07/24/19 09:55
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-25
Matrix: Solid
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	<0.37		0.37	0.085	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
4-Nitrophenol	<0.75	*	0.75	0.35	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Anthracene	<0.037	*	0.037	0.0062	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-5
Date Collected: 07/24/19 09:55
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-25
Matrix: Solid
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	<0.037		0.037	0.0096	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Phenanthrene	**0.023**	**J**	0.037	0.0052	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	07/30/19 07:55	07/31/19 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*53*		*31 - 143*	*07/30/19 07:55*	*07/31/19 13:51*	*1*
2-Fluorobiphenyl	*71*		*43 - 145*	*07/30/19 07:55*	*07/31/19 13:51*	*1*
2-Fluorophenol	*88*		*31 - 166*	*07/30/19 07:55*	*07/31/19 13:51*	*1*
Nitrobenzene-d5	*64*		*37 - 147*	*07/30/19 07:55*	*07/31/19 13:51*	*1*
Phenol-d5	*76*		*30 - 153*	*07/30/19 07:55*	*07/31/19 13:51*	*1*
Terphenyl-d14	*100*		*42 - 157*	*07/30/19 07:55*	*07/31/19 13:51*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.37**	**J**	1.1	0.21	mg/Kg	☼	07/27/19 16:42	07/30/19 16:11	1
Arsenic	**6.2**		0.54	0.19	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Barium	**36**		0.54	0.062	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Beryllium	**0.55**		0.22	0.051	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Boron	**13**		2.7	0.25	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Cadmium	**0.19**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Calcium	**83000**	**B**	54	9.2	mg/Kg	☼	07/27/19 16:42	07/30/19 16:16	5
Chromium	**13**		0.54	0.27	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Cobalt	**9.7**		0.27	0.071	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Copper	**18**		0.54	0.15	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Iron	**14000**		11	5.7	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Lead	**9.4**		0.27	0.13	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Magnesium	**43000**		27	14	mg/Kg	☼	07/27/19 16:42	07/30/19 16:16	5
Manganese	**460**		0.54	0.079	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Nickel	**23**		0.54	0.16	mg/Kg	☼	07/27/19 16:42	07/30/19 16:11	1
Potassium	**2600**		27	9.6	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Silver	**1.9**		0.27	0.070	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Sodium	**210**		54	8.1	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Vanadium	**17**		0.27	0.064	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1
Zinc	**54**		1.1	0.48	mg/Kg	☼	07/27/19 16:42	07/30/19 00:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		07/27/19 15:47	07/29/19 15:45	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B06-5

Date Collected: 07/24/19 09:55
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-25

Matrix: Solid
Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/27/19 15:41	07/29/19 16:29	1
Barium	**0.063**	**J**	0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:29	1
Boron	**0.065**	**J**	0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:41	07/29/19 16:29	1
Calcium	**12**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:29	1
Chromium	**0.012**	**J**	0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:29	1
Cobalt	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:29	1
Iron	**6.0**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:29	1
Manganese	**0.056**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:29	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:29	1
Potassium	**5.3**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:29	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:29	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:29	1
Zinc	**0.021**	**J**	0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:29	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		07/27/19 15:41	08/01/19 15:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:37	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		07/30/19 10:05	07/31/19 08:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0091**	**J**	0.019	0.0062	mg/Kg	☼	08/02/19 13:00	08/05/19 10:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.27	mg/Kg	☼	08/07/19 10:10	08/07/19 15:01	1
pH	**8.2**		0.2	0.2	SU			07/30/19 14:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B07
Date Collected: 07/24/19 12:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-26
Matrix: Solid
Percent Solids: 86.2

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	☼	07/25/19 17:47	08/01/19 14:44	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 134*	*07/25/19 17:47*	*08/01/19 14:44*	*1*
4-Bromofluorobenzene (Surr)	*87*		*75 - 131*	*07/25/19 17:47*	*08/01/19 14:44*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*07/25/19 17:47*	*08/01/19 14:44*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*07/25/19 17:47*	*08/01/19 14:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B07
Date Collected: 07/24/19 12:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-26
Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
4-Nitrophenol	<0.76	*	0.76	0.36	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Anthracene	<0.038	*	0.038	0.0063	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1

Client Sample ID: 1896V2-43-B07

Date Collected: 07/24/19 12:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-26

Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Phenanthrene	**0.022**	**J**	0.038	0.0053	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1
Pyrene	**0.013**	**J**	0.038	0.0075	mg/Kg	☼	07/30/19 07:55	07/31/19 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*31 - 143*	*07/30/19 07:55*	*07/31/19 14:21*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*07/30/19 07:55*	*07/31/19 14:21*	*1*
2-Fluorophenol	*98*		*31 - 166*	*07/30/19 07:55*	*07/31/19 14:21*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*07/30/19 07:55*	*07/31/19 14:21*	*1*
Phenol-d5	*89*		*30 - 153*	*07/30/19 07:55*	*07/31/19 14:21*	*1*
Terphenyl-d14	*105*		*42 - 157*	*07/30/19 07:55*	*07/31/19 14:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	**3.8**		0.38	0.14	mg/Kg	☼	07/30/19 07:55	08/02/19 20:36	2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.61**	**J**	1.1	0.22	mg/Kg	☼	07/27/19 16:42	07/30/19 16:19	1
Arsenic	**4.2**		0.57	0.20	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Barium	**27**		0.57	0.065	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Beryllium	**0.64**		0.23	0.053	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Boron	**13**		2.9	0.27	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Cadmium	**0.15**	**B**	0.11	0.021	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Calcium	**72000**	**B**	57	9.7	mg/Kg	☼	07/27/19 16:42	07/30/19 16:24	5
Chromium	**15**		0.57	0.28	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Cobalt	**9.9**		0.29	0.075	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Copper	**25**		0.57	0.16	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Iron	**16000**		11	5.9	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Lead	**11**		0.29	0.13	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Magnesium	**34000**		5.7	2.8	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Manganese	**430**		0.57	0.083	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Nickel	**28**		0.57	0.17	mg/Kg	☼	07/27/19 16:42	07/30/19 16:19	1
Potassium	**2800**		29	10	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Silver	**2.3**		0.29	0.074	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Sodium	**430**		57	8.4	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Thallium	**0.73**		0.57	0.28	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Vanadium	**19**		0.29	0.067	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	1
Zinc	**50**		1.1	0.50	mg/Kg	☼	07/27/19 16:42	07/30/19 00:06	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		07/27/19 15:47	07/29/19 15:49	1

Client Sample ID: 1896V2-43-B07
Date Collected: 07/24/19 12:50
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-26
Matrix: Solid
Percent Solids: 86.2

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		07/27/19 15:47	07/29/19 15:49	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:47	07/29/19 15:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:47	07/29/19 15:49	1
Manganese	**1.1**		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:49	1
Nickel	**0.037**		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.027**	**J**	0.050	0.010	mg/L		07/27/19 15:41	07/29/19 16:33	1
Barium	**0.34**	**J**	0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:33	1
Beryllium	**0.0061**		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:33	1
Boron	**0.21**		0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:41	07/29/19 16:33	1
Calcium	**46**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:33	1
Chromium	**0.15**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:33	1
Cobalt	**0.072**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:33	1
Iron	**110**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:33	1
Lead	**0.081**		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:33	1
Manganese	**0.60**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:33	1
Nickel	**0.20**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:33	1
Potassium	**42**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:33	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:33	1
Silver	**0.011**	**J**	0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:33	1
Zinc	**0.30**	**J**	0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:47	08/02/19 20:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:41	08/01/19 15:38	1
Thallium	**0.0026**		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:38	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		07/30/19 10:05	07/31/19 08:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0096**	**J**	0.018	0.0061	mg/Kg	☼	08/02/19 13:00	08/05/19 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.29	mg/Kg	☼	08/07/19 10:10	08/07/19 15:01	1
pH	**8.4**		0.2	0.2	SU			07/30/19 14:51	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B08
Date Collected: 07/24/19 13:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-27
Matrix: Solid
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	<0.0018		0.0018	0.00061	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	07/25/19 17:47	08/01/19 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 134*	*07/25/19 17:47*	*08/01/19 15:10*	*1*
4-Bromofluorobenzene (Surr)	*88*		*75 - 131*	*07/25/19 17:47*	*08/01/19 15:10*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*07/25/19 17:47*	*08/01/19 15:10*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*07/25/19 17:47*	*08/01/19 15:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B08
Date Collected: 07/24/19 13:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-27
Matrix: Solid
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	☼	07/30/19 07:55	07/31/19 14:50	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
4-Nitrophenol	<0.77	*	0.77	0.36	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Anthracene	<0.038	*	0.038	0.0063	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Bis(2-ethylhexyl) phthalate	**1.4**		0.19	0.069	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

Client Sample ID: 1896V2-43-B08
Date Collected: 07/24/19 13:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-27
Matrix: Solid
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	<0.038		0.038	0.0098	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/30/19 07:55	07/31/19 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*65*		*31 - 143*	*07/30/19 07:55*	*07/31/19 14:50*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*07/30/19 07:55*	*07/31/19 14:50*	*1*
2-Fluorophenol	*97*		*31 - 166*	*07/30/19 07:55*	*07/31/19 14:50*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*07/30/19 07:55*	*07/31/19 14:50*	*1*
Phenol-d5	*86*		*30 - 153*	*07/30/19 07:55*	*07/31/19 14:50*	*1*
Terphenyl-d14	*101*		*42 - 157*	*07/30/19 07:55*	*07/31/19 14:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.55**	**J**	1.1	0.21	mg/Kg	☼	07/27/19 16:42	07/30/19 16:28	1
Arsenic	**7.0**		0.54	0.19	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Barium	**30**		0.54	0.062	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Beryllium	**0.54**		0.22	0.051	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Boron	**10**		2.7	0.25	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Cadmium	**0.18**	**B**	0.11	0.020	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Calcium	**73000**	**B**	54	9.2	mg/Kg	☼	07/27/19 16:42	07/30/19 16:40	5
Chromium	**12**		0.54	0.27	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Cobalt	**11**		0.27	0.071	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Copper	**24**		0.54	0.15	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Iron	**18000**		11	5.6	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Lead	**12**		0.27	0.13	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Magnesium	**41000**		27	13	mg/Kg	☼	07/27/19 16:42	07/30/19 16:40	5
Manganese	**590**		0.54	0.079	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Nickel	**27**		0.54	0.16	mg/Kg	☼	07/27/19 16:42	07/30/19 16:28	1
Potassium	**2200**		27	9.6	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Selenium	**0.39**	**J**	0.54	0.32	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Silver	**2.1**		0.27	0.070	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Sodium	**610**		54	8.0	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Thallium	**0.57**		0.54	0.27	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Vanadium	**16**		0.27	0.064	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	1
Zinc	**64**		1.1	0.48	mg/Kg	☼	07/27/19 16:42	07/30/19 00:10	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		07/27/19 15:47	07/29/19 15:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:47	07/29/19 15:53	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:53	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:47	07/29/19 15:53	1

Client Sample ID: 1896V2-43-B08
Date Collected: 07/24/19 13:15
Date Received: 07/25/19 10:45

Lab Sample ID: 500-167280-27
Matrix: Solid
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		07/27/19 15:47	07/29/19 15:53	1
Manganese	**0.61**		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:53	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:47	07/29/19 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.073**		0.050	0.010	mg/L		07/27/19 15:41	07/29/19 16:37	1
Barium	**0.33**	**J**	0.50	0.050	mg/L		07/27/19 15:41	07/29/19 16:37	1
Beryllium	**0.0058**		0.0040	0.0040	mg/L		07/27/19 15:41	07/29/19 16:37	1
Boron	**0.21**		0.10	0.050	mg/L		07/27/19 15:41	07/29/19 16:37	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/27/19 15:41	07/29/19 16:37	1
Calcium	**24**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:37	1
Chromium	**0.13**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:37	1
Cobalt	**0.051**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:37	1
Iron	**150**		0.40	0.20	mg/L		07/27/19 15:41	07/29/19 16:37	1
Lead	**0.073**		0.0075	0.0075	mg/L		07/27/19 15:41	07/29/19 16:37	1
Manganese	**0.53**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:37	1
Nickel	**0.18**		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:37	1
Potassium	**36**		2.5	0.50	mg/L		07/27/19 15:41	07/29/19 16:37	1
Selenium	<0.050		0.050	0.020	mg/L		07/27/19 15:41	07/29/19 16:37	1
Silver	<0.025		0.025	0.010	mg/L		07/27/19 15:41	07/29/19 16:37	1
Zinc	**0.60**		0.50	0.020	mg/L		07/27/19 15:41	07/29/19 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:47	08/02/19 20:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/27/19 15:41	08/01/19 15:39	1
Thallium	**0.0060**		0.0020	0.0020	mg/L		07/27/19 15:41	08/01/19 15:39	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		07/30/19 10:05	07/31/19 08:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.019	0.0062	mg/Kg	☼	08/02/19 13:00	08/05/19 10:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.24	mg/Kg	☼	08/07/19 10:10	08/07/19 15:01	1
pH	**9.0**		0.2	0.2	SU			07/30/19 14:53	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167280-1

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

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.
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.
¤	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 - AE7-22A

Job ID: 500-167280-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-20

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

ANDREWS ENGINEERING

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

500-167280 COC

Laboratory

Lab: **Test America - Chicago**
Address: **2417 Bond Street**
University Park, IL 60484
Phone: **708-534-5200**
Contact: **Dick Wright**
email: richard.wright@testamericainc.com

Project Name: AE7t-22A
Project No.: PTB/WO:184-006/22A
TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other
Sampler: Joshua Utley

COC No.: 1 of 3
Lab Job No.: 500-167280
Sample Temp: 2.8, 4.1, 4.4, 2.3

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.

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: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	1896V2-43-B01	7-24	1200	S	X	X					X	X	X	X	X					
2	1896V2-43-B02		1100																	
3	1896V2-43-B03-1		1010																	
4	1896V2-43-B03-2		1015																	
5	1896V2-43-B03-3		1020																	
6	1896V2-43-B03-4		1025																	
7	1896V2-43-B03-5		1030																	
8	1896V2-43-B04-1		0845																	
9	1896V2-43-B04-2		0850																	
10	1896V2-43-B04-2DUP		0855																	
11	1896V2-43-B04-3		0900																	
~~12~~	~~TS~~ 7/25/19																			

Relinquished by:	Date/Time 7/24/19 5:00PM	Received by:	Date/Time 7/25/19 0915
Relinquished by:	Date/Time 7/25/19 1045	Received by:	Date/Time 7/25/19 1045
Relinquished by:	Date/Time	Received by:	Date/Time

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING

Client Contact	Laboratory	Project Name: AE7-22A	COC No.: 2 of 3
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.: PTB/IVO:184-006/22A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** Joshua Grey	Lab Job No.: 500-167280 Sample Temp: 2.8, 4.1, 4.4, 2.3

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.

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: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
13 12	1896V2-43-B04-4	7-24	0905	S	X	X					X	X	X	X	X					
14 13	1896V2-43-B04-5	7-24	0910																	
7/25/19 15 14	1896V2-43-B05-1		1220																	
16 15	1896V2-43-B05-2		1225																	
17 16	1896V2-43-B05-3		1230																	
18 17	1896V2-43-B05-4		1235																	
19 18	1896V2-43-B05-5		1240																	
20 19	1896V2-43-B06-1		0930																	
21 20	1896V2-43-B06-2		0935																	
22 21	1896V2-43-B06-2DUP		0940																	
22	1896V2-43-B06-3		0945																	
23	Trip Blank #2				X															

Relinquished by:	Date/Time 7/24/19 5:00pm	Received by: ANGGHA BALAKRISHNAN	Date/Time 7/24/19 5:00PM
Relinquished by: ANGGHA BALAKRISHNAN	Date/Time 7/25/19 9:15am	Received by:	Date/Time 7/25/19 0915
Relinquished by:	Date/Time 7/25/19 1045	Received by:	Date/Time 7/25/19 1045

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory		
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 Name: AE7 - 82A Project No.: PTB/LVO: 184-006/R2A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** Joshua Hey	COC No.: 3 of 3 Lab Job No.: 500-167280 Sample Temp: 28.4 / 44/23

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.

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: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
24	1896V2-43-B06-4	7-24	0950	S	X	X					X	X	X	X	X					
25	1896V2-43-B06-5	↓	0955	↓	↓	↓					↓	↓	↓	↓	↓					
26	1896V2-43-B07	↓	1250	↓	↓	↓					↓	↓	↓	↓	↓					
27	1896V2-43-B08	↓	1315	↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 7/24/19 5:00pm	Received by: ANEESHA BALAKRISHNAN	Date/Time 7/24/19 5:00pm
Relinquished by: ANEESHA BALAKRISHNAN	Date/Time 7/25/19 9:15am	Received by:	Date/Time 7/25/19 0915
Relinquished by:	Date/Time 7/25/19 1045	Received by:	Date/Time 7/25/19 1045

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 346 (US 41/North Skokie Highway) Office Phone Number, if available:

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

City: Lake Bluff State: IL Zip Code: 60044

County: Cook Township: Shields

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

Latitude: 42.27943 Longitude: - 87.86492

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

Additional BOL: 0970755098 & 0970755119

IEPA Site Number(s), if assigned: BOL: 0970755072 BOW: BOA:

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

Estimated Volume of debris (cu. Yd.): 617

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.

Project Name: FAP 346 (US 41/North Skokie Highway) Latitude: 42.27943 Longitude: - 87.86492

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 1896V2-57-B01, 1896V2-57-B03 AND 1896V2-57-B05 WERE SAMPLED ADJACENT TO SITE 1896V3-57. SEE TABLE 3c 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: 500-167311-1.

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:

Jul 1, 2024
Date:

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

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
1,1,2,2-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 1896V3-57
Mariani Landscape

Sample ID	1896V2-57-B01	1896V2-57-B03	1896V2-57-B05	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8	0-8	0-7					
Sample Date	7/25/2019	7/25/2019	7/25/2019					
PID	0	0	0					
Sample pH	8.6	7.6	7.7	[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
Matrix	Soil	Soil	Soil					
No Contaminants of Concern Noted.								

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 500-167311-1
Client Project/Site: IDOT - AE7-22A

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/9/2019 5:05:16 PM
Eric Lang, Manager of Project Management
(708)534-5200
eric.lang@testamericainc.com

Designee for

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

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167311-1

Client Sample ID: 1896V2-57-B01
Date Collected: 07/25/19 09:20
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-1
Matrix: Solid
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	<0.0017		0.0017	0.00056	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Acetone	**0.016**	**J**	0.017	0.0073	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	07/25/19 17:47	07/30/19 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*07/25/19 17:47*	*07/30/19 03:54*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*07/25/19 17:47*	*07/30/19 03:54*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*07/25/19 17:47*	*07/30/19 03:54*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*07/25/19 17:47*	*07/30/19 03:54*	*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	0.043	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1

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Lab Sample ID: 500-167311-1
Matrix: Solid
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	0.091	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Bis(2-ethylhexyl) phthalate	**1.4**		0.20	0.073	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1

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Matrix: Solid
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	<0.039		0.039	0.010	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Naphthalene	**0.017**	**J**	0.039	0.0061	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1
Pyrene	**0.014**	**J**	0.039	0.0079	mg/Kg	☼	07/30/19 16:21	07/31/19 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*67*		*31 - 143*	*07/30/19 16:21*	*07/31/19 15:20*	*1*
2-Fluorobiphenyl	*90*		*43 - 145*	*07/30/19 16:21*	*07/31/19 15:20*	*1*
2-Fluorophenol	*104*		*31 - 166*	*07/30/19 16:21*	*07/31/19 15:20*	*1*
Nitrobenzene-d5	*79*		*37 - 147*	*07/30/19 16:21*	*07/31/19 15:20*	*1*
Phenol-d5	*95*		*30 - 153*	*07/30/19 16:21*	*07/31/19 15:20*	*1*
Terphenyl-d14	*111*		*42 - 157*	*07/30/19 16:21*	*07/31/19 15:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.29**	**J B**	1.1	0.22	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Arsenic	**10**		0.56	0.19	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Barium	**49**		0.56	0.064	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Beryllium	**0.71**		0.23	0.053	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Boron	**15**		2.8	0.26	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Cadmium	**0.21**	**B**	0.11	0.020	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Calcium	**60000**	**B**	56	9.6	mg/Kg	☼	07/30/19 16:26	08/01/19 15:41	5
Chromium	**18**		0.56	0.28	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Cobalt	**14**		0.28	0.074	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Copper	**22**		0.56	0.16	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Iron	**20000**	**B**	11	5.9	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Lead	**13**		0.28	0.13	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Magnesium	**28000**		5.6	2.8	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Manganese	**440**		0.56	0.082	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Nickel	**32**		0.56	0.16	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Potassium	**3300**		28	10	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Selenium	**0.56**		0.56	0.33	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Silver	**3.2**		0.28	0.073	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Sodium	**710**		56	8.4	mg/Kg	☼	07/30/19 16:26	08/01/19 12:49	1
Thallium	**0.65**		0.56	0.28	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Vanadium	**23**		0.28	0.067	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	1
Zinc	**61**		1.1	0.50	mg/Kg	☼	07/30/19 16:26	07/31/19 20:52	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		08/02/19 06:58	08/02/19 18:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/02/19 06:58	08/02/19 18:39	1
Chromium	<0.025		0.025	0.010	mg/L		08/02/19 06:58	08/02/19 18:39	1
Iron	<0.40		0.40	0.20	mg/L		08/02/19 06:58	08/02/19 18:39	1

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Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/02/19 06:58	08/02/19 18:39	1
Manganese	**0.94**		0.025	0.010	mg/L		08/02/19 06:58	08/02/19 18:39	1
Nickel	<0.025		0.025	0.010	mg/L		08/02/19 06:58	08/02/19 18:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.060**	**J**	0.10	0.020	mg/L		08/02/19 06:56	08/05/19 12:13	2
Barium	**0.51**		0.50	0.050	mg/L		08/02/19 06:56	08/02/19 14:51	1
Beryllium	**0.0065**		0.0040	0.0040	mg/L		08/02/19 06:56	08/02/19 14:51	1
Boron	**0.27**		0.10	0.050	mg/L		08/02/19 06:56	08/02/19 14:51	1
Cadmium	<0.010		0.010	0.0040	mg/L		08/02/19 06:56	08/05/19 12:13	2
Calcium	**28**		2.5	0.50	mg/L		08/02/19 06:56	08/02/19 14:51	1
Chromium	**0.17**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:51	1
Cobalt	**0.056**		0.050	0.020	mg/L		08/02/19 06:56	08/05/19 12:13	2
Iron	**150**		0.40	0.20	mg/L		08/02/19 06:56	08/02/19 14:51	1
Lead	**0.062**		0.015	0.015	mg/L		08/02/19 06:56	08/05/19 12:13	2
Manganese	**1.0**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:51	1
Nickel	**0.17**		0.050	0.020	mg/L		08/02/19 06:56	08/05/19 12:13	2
Potassium	**47**		2.5	0.50	mg/L		08/02/19 06:56	08/02/19 14:51	1
Selenium	<0.050		0.050	0.020	mg/L		08/02/19 06:56	08/02/19 14:51	1
Silver	**0.013**	**J**	0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:51	1
Zinc	**0.43**	**J**	0.50	0.020	mg/L		08/02/19 06:56	08/02/19 14:51	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		08/02/19 06:58	08/06/19 14:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/02/19 06:56	08/06/19 11:40	1
Thallium	**0.0040**		0.0020	0.0020	mg/L		08/02/19 06:56	08/06/19 11:40	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		08/02/19 14:35	08/05/19 08:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0064	mg/Kg	☼	08/01/19 13:00	08/02/19 08:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.61		0.61	0.30	mg/Kg	☼	08/07/19 10:10	08/07/19 15:01	1
pH	**8.6**		0.2	0.2	SU			08/01/19 15:07	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167311-1

Client Sample ID: 1896V2-57-B03
Date Collected: 07/25/19 10:00
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-3
Matrix: Solid
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	<0.0019		0.0019	0.00065	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Acetone	**0.014**	**J**	0.019	0.0084	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	07/25/19 17:47	07/30/19 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/25/19 17:47*	*07/30/19 04:46*	*1*
4-Bromofluorobenzene (Surr)	*83*		*75 - 131*	*07/25/19 17:47*	*07/30/19 04:46*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*07/25/19 17:47*	*07/30/19 04:46*	*1*
Toluene-d8 (Surr)	*93*		*75 - 124*	*07/25/19 17:47*	*07/30/19 04:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167311-1

Client Sample ID: 1896V2-57-B03
Date Collected: 07/25/19 10:00
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-3
Matrix: Solid
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	☼	07/30/19 16:21	07/31/19 15:50	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2,4-Dinitrophenol	<0.85		0.85	0.75	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2-Methylnaphthalene	<0.085		0.085	0.0078	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Bis(2-ethylhexyl) phthalate	**0.43**		0.21	0.077	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Chrysene	<0.042		0.042	0.012	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Fluoranthene	<0.042		0.042	0.0079	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1

Client Sample ID: 1896V2-57-B03
Date Collected: 07/25/19 10:00
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-3
Matrix: Solid
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	☼	07/30/19 16:21	07/31/19 15:50	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Naphthalene	**0.022**	**J**	0.042	0.0065	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1
Pyrene	<0.042		0.042	0.0084	mg/Kg	☼	07/30/19 16:21	07/31/19 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*31 - 143*	*07/30/19 16:21*	*07/31/19 15:50*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*07/30/19 16:21*	*07/31/19 15:50*	*1*
2-Fluorophenol	*106*		*31 - 166*	*07/30/19 16:21*	*07/31/19 15:50*	*1*
Nitrobenzene-d5	*78*		*37 - 147*	*07/30/19 16:21*	*07/31/19 15:50*	*1*
Phenol-d5	*101*		*30 - 153*	*07/30/19 16:21*	*07/31/19 15:50*	*1*
Terphenyl-d14	*134*		*42 - 157*	*07/30/19 16:21*	*07/31/19 15:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.31**	**J B**	1.2	0.24	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Arsenic	**1.9**		0.61	0.21	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Barium	**46**		0.61	0.070	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Beryllium	**0.54**		0.25	0.057	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Boron	**4.2**		3.1	0.29	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Cadmium	**0.24**	**B**	0.12	0.022	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Calcium	**13000**	**B**	12	2.1	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Chromium	**14**		0.61	0.30	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Cobalt	**6.5**		0.31	0.080	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Copper	**14**		0.61	0.17	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Iron	**9900**	**B**	12	6.4	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Lead	**11**		0.31	0.14	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Magnesium	**8500**		6.1	3.0	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Manganese	**110**		0.61	0.089	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Nickel	**17**		0.61	0.18	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Potassium	**890**		31	11	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Selenium	<0.61		0.61	0.36	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Silver	**3.0**		0.31	0.079	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Sodium	**150**		61	9.1	mg/Kg	☼	07/30/19 16:26	08/01/19 13:05	1
Thallium	**0.68**		0.61	0.31	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Vanadium	**22**		0.31	0.072	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1
Zinc	**39**		1.2	0.54	mg/Kg	☼	07/30/19 16:26	07/31/19 21:08	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		08/02/19 06:58	08/02/19 18:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/02/19 06:58	08/02/19 18:47	1

Client Sample ID: 1896V2-57-B03

Date Collected: 07/25/19 10:00
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-3

Matrix: Solid
Percent Solids: 77.9

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		08/02/19 06:56	08/02/19 14:59	1
Barium	**0.18**	**J**	0.50	0.050	mg/L		08/02/19 06:56	08/02/19 14:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/02/19 06:56	08/02/19 14:59	1
Boron	**0.070**	**J**	0.10	0.050	mg/L		08/02/19 06:56	08/02/19 14:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/02/19 06:56	08/02/19 14:59	1
Calcium	**14**		2.5	0.50	mg/L		08/02/19 06:56	08/02/19 14:59	1
Chromium	**0.064**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:59	1
Cobalt	**0.014**	**J**	0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:59	1
Iron	**33**		0.40	0.20	mg/L		08/02/19 06:56	08/02/19 14:59	1
Lead	**0.032**		0.0075	0.0075	mg/L		08/02/19 06:56	08/02/19 14:59	1
Manganese	**0.093**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:59	1
Nickel	**0.031**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:59	1
Potassium	**7.9**		2.5	0.50	mg/L		08/02/19 06:56	08/02/19 14:59	1
Selenium	<0.050		0.050	0.020	mg/L		08/02/19 06:56	08/02/19 14:59	1
Silver	<0.025		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 14:59	1
Zinc	**0.098**	**J**	0.50	0.020	mg/L		08/02/19 06:56	08/02/19 14:59	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		08/02/19 06:56	08/06/19 11:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/02/19 06:56	08/06/19 11:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/02/19 14:35	08/05/19 08:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.020	0.0067	mg/Kg	☼	08/01/19 13:00	08/02/19 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	08/07/19 10:10	08/07/19 15:03	1
pH	**7.6**		0.2	0.2	SU			08/01/19 15:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167311-1

Client Sample ID: 1896V2-57-B05
Date Collected: 07/25/19 10:45
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-6
Matrix: Solid
Percent Solids: 81.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00069	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
1,1-Dichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
2-Butanone (MEK)	**0.012**		0.0054	0.0024	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Acetone	**0.13**		0.022	0.0095	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Bromoform	<0.0022		0.0022	0.00063	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Bromomethane	<0.0054		0.0054	0.0021	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Chloroethane	<0.0054		0.0054	0.0016	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Methylene Chloride	**0.0022**	**J**	0.0054	0.0021	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Trichloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1
Xylenes, Total	<0.0043		0.0043	0.00070	mg/Kg	☼	07/25/19 17:47	07/30/19 06:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*07/25/19 17:47*	*07/30/19 06:02*	*1*
4-Bromofluorobenzene (Surr)	*83*		*75 - 131*	*07/25/19 17:47*	*07/30/19 06:02*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*07/25/19 17:47*	*07/30/19 06:02*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*07/25/19 17:47*	*07/30/19 06:02*	*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	0.043	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1

Client Sample ID: 1896V2-57-B05
Date Collected: 07/25/19 10:45
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-6
Matrix: Solid
Percent Solids: 81.0

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	0.091	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2-Methylnaphthalene	**0.013**	**J**	0.081	0.0074	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Bis(2-ethylhexyl) phthalate	**0.17**	**J**	0.20	0.073	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1

Client Sample ID: 1896V2-57-B05
Date Collected: 07/25/19 10:45
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-6
Matrix: Solid
Percent Solids: 81.0

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	☼	07/30/19 16:21	07/31/19 17:18	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Naphthalene	**0.041**		0.040	0.0062	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	07/30/19 16:21	07/31/19 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*31 - 143*	*07/30/19 16:21*	*07/31/19 17:18*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*07/30/19 16:21*	*07/31/19 17:18*	*1*
2-Fluorophenol	*103*		*31 - 166*	*07/30/19 16:21*	*07/31/19 17:18*	*1*
Nitrobenzene-d5	*74*		*37 - 147*	*07/30/19 16:21*	*07/31/19 17:18*	*1*
Phenol-d5	*94*		*30 - 153*	*07/30/19 16:21*	*07/31/19 17:18*	*1*
Terphenyl-d14	*130*		*42 - 157*	*07/30/19 16:21*	*07/31/19 17:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.27**	**J B**	1.2	0.22	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Arsenic	**2.0**		0.58	0.20	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Barium	**40**		0.58	0.066	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Beryllium	**0.53**		0.23	0.054	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Boron	**4.9**		2.9	0.27	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Cadmium	**0.25**	**B**	0.12	0.021	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Calcium	**21000**	**B**	12	2.0	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Chromium	**12**		0.58	0.29	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Cobalt	**7.8**		0.29	0.076	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Copper	**17**		0.58	0.16	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Iron	**11000**	**B**	12	6.0	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Lead	**9.7**		0.29	0.13	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Magnesium	**14000**		5.8	2.9	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Manganese	**250**		0.58	0.084	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Nickel	**17**		0.58	0.17	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Potassium	**1100**		29	10	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Selenium	**0.46**	**J**	0.58	0.34	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Silver	**2.9**		0.29	0.074	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Sodium	**160**		58	8.5	mg/Kg	☼	07/30/19 16:26	08/01/19 13:17	1
Thallium	**0.60**		0.58	0.29	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Vanadium	**16**		0.29	0.068	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1
Zinc	**53**		1.2	0.51	mg/Kg	☼	07/30/19 16:26	07/31/19 21:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.20**	**J**	0.40	0.20	mg/L		08/02/19 06:58	08/02/19 19:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/02/19 06:58	08/02/19 19:24	1
Manganese	**3.0**		0.025	0.010	mg/L		08/02/19 06:58	08/02/19 19:24	1

Client Sample ID: 1896V2-57-B05

Date Collected: 07/25/19 10:45
Date Received: 07/25/19 16:00

Lab Sample ID: 500-167311-6

Matrix: Solid
Percent Solids: 81.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/02/19 06:56	08/02/19 15:11	1
Barium	**0.18**	**J**	0.50	0.050	mg/L		08/02/19 06:56	08/02/19 15:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/02/19 06:56	08/02/19 15:11	1
Boron	**0.11**		0.10	0.050	mg/L		08/02/19 06:56	08/02/19 15:11	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/02/19 06:56	08/02/19 15:11	1
Calcium	**19**		2.5	0.50	mg/L		08/02/19 06:56	08/02/19 15:11	1
Chromium	**0.064**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 15:11	1
Cobalt	**0.020**	**J**	0.025	0.010	mg/L		08/02/19 06:56	08/02/19 15:11	1
Iron	**45**		0.40	0.20	mg/L		08/02/19 06:56	08/02/19 15:11	1
Lead	**0.043**		0.0075	0.0075	mg/L		08/02/19 06:56	08/02/19 15:11	1
Manganese	**0.24**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 15:11	1
Nickel	**0.034**		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 15:11	1
Potassium	**11**		2.5	0.50	mg/L		08/02/19 06:56	08/02/19 15:11	1
Selenium	<0.050		0.050	0.020	mg/L		08/02/19 06:56	08/02/19 15:11	1
Silver	<0.025		0.025	0.010	mg/L		08/02/19 06:56	08/02/19 15:11	1
Zinc	**0.18**	**J**	0.50	0.020	mg/L		08/02/19 06:56	08/02/19 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/02/19 06:56	08/06/19 11:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/02/19 06:56	08/06/19 11:46	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		08/02/19 14:35	08/05/19 08:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.019	0.0065	mg/Kg	☼	08/01/19 13:00	08/02/19 08:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.27	mg/Kg	☼	08/07/19 10:10	08/07/19 15:04	1
pH	**7.7**		0.2	0.2	SU			08/01/19 15:19	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167311-1

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
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
H	Sample was prepped or analyzed beyond the specified holding time

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 - AE7-22A

Job ID: 500-167311-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-20

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

ANDREWS ENGINEERING

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

500-167311 COC

Laboratory

Lab: **Test America - Chicago**
Address: **2417 Bond Street**
University Park, IL 60484
Phone: **708-534-5200**
Contact: **Dick Wright**
email: richard.wright@testamericainc.com

Project Name: AE7-22A
Project No.: PTB/WO:184-006/22A
TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other
Sampler: Joshua Grey

COC No.: 1 of 1
Lab Job No.: 500-167311
Sample Temp: 5.8

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.

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: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	1896V2-57-1301	7-25	0920	S	X	X					X	X	X	X	X					
2	1896V2-57-1302	↓	0940	↓	↓	↓					↓	↓	↓	↓	↓					
3	1896V2-57-1303		1000																	
4	1896V2-57-1304		1020																	
5	1896V2-57-1304DUP		1025																	
6	1896V2-57-1305		1045																	
7	Trip Blank #3				X															

Relinquished by:		Date/Time 7-25-19 1445	Received by:	Date/Time 7/25/19 1445
Relinquished by:		Date/Time 7/25/19 1600	Received by:	Date/Time 7/25/19 1600
Relinquished by:		Date/Time	Received by:	Date/Time

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 346 (US 41/North Skokie Highway) Office Phone Number, if available:

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

City: Lake Bluff State: IL Zip Code: 60044

County: Cook Township: Shields

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

Latitude: 42.27941 (Decimal Degrees) Longitude: -87.86834 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

Additional BOL: 0970755092

IEPA Site Number(s), if assigned: BOL: 0970750003 BOW: BOA:

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

Estimated Volume of debris (cu. Yd.): 446

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.

Project Name: FAP 346 (US 41/North Skokie Highway) Latitude: 42.27941 Longitude: - 87.86834

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 1896V2-59-B01, 1896V2-59-B02 AND 1896V2-59-B03 WERE SAMPLED ADJACENT TO SITE 1896V3-59. SEE TABLE 3e 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: 500-167183-1.

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:

Jul 1, 2024
Date:

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

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
1,1,2,2-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 1896V3-59
Knauz Corporate Headquarters and
Hyundai Dealership

Sample ID	1896V2-59-B01-1		1896V2-59-B01-2		1896V2-59-B01-2 DUP		1896V2-59-B02-1		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7		7-14		7-14		0-7						
Sample Date	7/23/2019		7/23/2019		7/23/2019		7/23/2019						
PID	0		0		0		0						
Sample pH	8.8		8		8.6		8.5		[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
Matrix	Soil		Soil		Soil		Soil						
Inorganic Compounds, Total (mg/kg)													
Arsenic	**6.9**		**6**		**6.6**		**7.5**		11.3	--	11.3	--	13

Sample ID	1896V2-59-B02-2		1896V2-59-B03-1		1896V2-59-B03-2		**Maximum Allowable Concentration**				
Sample Depth (ft)	7-14		0-7		7-14						
Sample Date	7/23/2019		7/23/2019		7/23/2019						
PID	0		0		0						
Sample pH	8.3		8.5		8.7		[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
Matrix	Soil		Soil		Soil						
Inorganic Compounds, Total (mg/kg)											
Arsenic	**12**	**1,3**	**7.5**		**7.1**		11.3	--	11.3	--	13

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 500-167183-1
Client Project/Site: IDOT - AE7-22A

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/6/2019 5:15:22 PM

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

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B01-1
Date Collected: 07/23/19 11:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-1
Matrix: Solid
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	<0.0015		0.0015	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*07/24/19 16:30*	*07/27/19 00:50*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*	*07/24/19 16:30*	*07/27/19 00:50*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*07/24/19 16:30*	*07/27/19 00:50*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*07/24/19 16:30*	*07/27/19 00:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B01-1
Date Collected: 07/23/19 11:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-1
Matrix: Solid
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	<0.38		0.38	0.088	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1

Client Sample ID: 1896V2-59-B01-1
Date Collected: 07/23/19 11:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-1
Matrix: Solid
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	<0.038		0.038	0.010	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	07/24/19 16:14	07/26/19 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*31 - 143*	*07/24/19 16:14*	*07/26/19 13:45*	*1*
2-Fluorobiphenyl	*97*		*43 - 145*	*07/24/19 16:14*	*07/26/19 13:45*	*1*
2-Fluorophenol	*110*		*31 - 166*	*07/24/19 16:14*	*07/26/19 13:45*	*1*
Nitrobenzene-d5	*82*		*37 - 147*	*07/24/19 16:14*	*07/26/19 13:45*	*1*
Phenol-d5	*97*		*30 - 153*	*07/24/19 16:14*	*07/26/19 13:45*	*1*
Terphenyl-d14	*133*		*42 - 157*	*07/24/19 16:14*	*07/26/19 13:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.47**	**J**	1.2	0.23	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Arsenic	**6.9**		0.59	0.20	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Barium	**48**		0.59	0.067	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Beryllium	**0.65**		0.23	0.055	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Boron	**13**		2.9	0.27	mg/Kg	☼	07/25/19 08:17	07/26/19 14:21	1
Cadmium	**0.20**	**B**	0.12	0.021	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Calcium	**71000**	**B**	59	9.9	mg/Kg	☼	07/25/19 08:17	07/26/19 14:25	5
Chromium	**16**		0.59	0.29	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Cobalt	**14**		0.29	0.077	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Copper	**23**		0.59	0.16	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Iron	**18000**		12	6.1	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Lead	**13**		0.29	0.14	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Magnesium	**31000**		5.9	2.9	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Manganese	**550**		0.59	0.085	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Nickel	**35**		0.59	0.17	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Potassium	**3200**		29	10	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Silver	**2.9**		0.29	0.076	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Sodium	**360**		59	8.7	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Thallium	**0.72**		0.59	0.29	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Vanadium	**20**		0.29	0.069	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1
Zinc	**52**		1.2	0.51	mg/Kg	☼	07/25/19 08:17	07/25/19 23:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:43	07/30/19 02:46	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:46	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:43	07/30/19 02:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:43	07/30/19 02:46	1

Client Sample ID: 1896V2-59-B01-1

Date Collected: 07/23/19 11:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-1

Matrix: Solid
Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.34**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:46	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:46	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		07/26/19 14:43	07/29/19 11:09	1
Barium	**0.44**	**J**	0.50	0.050	mg/L		07/26/19 14:43	07/29/19 11:09	1
Beryllium	**0.0066**		0.0040	0.0040	mg/L		07/26/19 14:43	07/29/19 11:09	1
Boron	**0.20**		0.10	0.050	mg/L		07/26/19 14:43	07/29/19 11:09	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:43	07/29/19 11:09	1
Calcium	**36**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:09	1
Chromium	**0.14**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:09	1
Cobalt	**0.036**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:09	1
Iron	**130**		0.40	0.20	mg/L		07/26/19 14:43	07/29/19 11:09	1
Lead	**0.051**		0.0075	0.0075	mg/L		07/26/19 14:43	07/29/19 11:09	1
Manganese	**0.51**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:09	1
Nickel	**0.15**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:09	1
Potassium	**38**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:09	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:43	07/29/19 11:09	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:09	1
Zinc	**0.39**	**J B**	0.50	0.020	mg/L		07/26/19 14:43	07/29/19 11:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:43	08/01/19 18:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/26/19 14:43	08/01/19 14:47	1
Thallium	**0.0029**		0.0020	0.0020	mg/L		07/26/19 14:43	07/31/19 19:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		07/26/19 15:35	07/29/19 10:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.029**		0.018	0.0061	mg/Kg	☼	08/01/19 13:00	08/02/19 07:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.26	mg/Kg	☼	08/05/19 13:00	08/06/19 11:30	1
pH	**8.8**		0.2	0.2	SU			07/25/19 13:13	1

Client Sample ID: 1896V2-59-B01-2
Date Collected: 07/23/19 11:15
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-2
Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Trichloroethene	<0.0016		0.0016	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/24/19 16:30*	*07/27/19 01:15*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*07/24/19 16:30*	*07/27/19 01:15*	*1*
Dibromofluoromethane	*110*		*75 - 126*	*07/24/19 16:30*	*07/27/19 01:15*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/24/19 16:30*	*07/27/19 01:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B01-2
Date Collected: 07/23/19 11:15
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-2
Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Benzo[a]anthracene	**0.0079**	**J**	0.038	0.0052	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Benzo[g,h,i]perylene	**0.018**	**J**	0.038	0.012	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Chrysene	**0.035**	**J**	0.038	0.010	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1

Client Sample ID: 1896V2-59-B01-2
Date Collected: 07/23/19 11:15
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-2
Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Phenanthrene	**0.033**	**J**	0.038	0.0053	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1
Pyrene	**0.029**	**J**	0.038	0.0076	mg/Kg	☼	07/24/19 16:14	07/26/19 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*31 - 143*	*07/24/19 16:14*	*07/26/19 15:13*	*1*
2-Fluorobiphenyl	*92*		*43 - 145*	*07/24/19 16:14*	*07/26/19 15:13*	*1*
2-Fluorophenol	*113*		*31 - 166*	*07/24/19 16:14*	*07/26/19 15:13*	*1*
Nitrobenzene-d5	*77*		*37 - 147*	*07/24/19 16:14*	*07/26/19 15:13*	*1*
Phenol-d5	*103*		*30 - 153*	*07/24/19 16:14*	*07/26/19 15:13*	*1*
Terphenyl-d14	*123*		*42 - 157*	*07/24/19 16:14*	*07/26/19 15:13*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.37**	**J**	1.1	0.22	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Arsenic	**6.0**		0.56	0.19	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Barium	**39**		0.56	0.064	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Beryllium	**0.61**		0.22	0.052	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Boron	**15**		2.8	0.26	mg/Kg	☼	07/25/19 08:17	07/26/19 14:29	1
Cadmium	**0.17**	**B**	0.11	0.020	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Calcium	**70000**	**B**	56	9.5	mg/Kg	☼	07/25/19 08:17	07/26/19 14:33	5
Chromium	**16**		0.56	0.28	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Cobalt	**10**		0.28	0.074	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Copper	**22**		0.56	0.16	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Iron	**17000**		11	5.8	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Lead	**11**		0.28	0.13	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Magnesium	**31000**		5.6	2.8	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Manganese	**390**		0.56	0.081	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Nickel	**27**		0.56	0.16	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Potassium	**4000**		28	9.9	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Selenium	**0.42**	**J**	0.56	0.33	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Silver	**2.9**		0.28	0.072	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Sodium	**280**		56	8.3	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Thallium	**0.54**	**J**	0.56	0.28	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Vanadium	**19**		0.28	0.066	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1
Zinc	**53**		1.1	0.49	mg/Kg	☼	07/25/19 08:17	07/25/19 23:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:43	07/30/19 02:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:43	07/30/19 02:50	1
Manganese	**1.5**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:50	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B01-2

Date Collected: 07/23/19 11:15
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-2

Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.016**	**J**	0.050	0.010	mg/L		07/26/19 14:43	07/29/19 11:13	1
Barium	**0.23**	**J**	0.50	0.050	mg/L		07/26/19 14:43	07/29/19 11:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/26/19 14:43	07/29/19 11:13	1
Boron	**0.15**		0.10	0.050	mg/L		07/26/19 14:43	07/29/19 11:13	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:43	07/29/19 11:13	1
Calcium	**29**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:13	1
Chromium	**0.082**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:13	1
Cobalt	**0.020**	**J**	0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:13	1
Iron	**60**		0.40	0.20	mg/L		07/26/19 14:43	07/29/19 11:13	1
Lead	**0.044**		0.0075	0.0075	mg/L		07/26/19 14:43	07/29/19 11:13	1
Manganese	**0.35**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:13	1
Nickel	**0.074**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:13	1
Potassium	**26**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:13	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:43	07/29/19 11:13	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:13	1
Zinc	**0.16**	**J B**	0.50	0.020	mg/L		07/26/19 14:43	07/29/19 11:13	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		07/26/19 14:43	08/01/19 14:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:43	07/31/19 19:04	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		07/26/19 15:35	07/29/19 10:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J**	0.019	0.0062	mg/Kg	☼	08/01/19 13:00	08/02/19 07:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	08/05/19 13:00	08/06/19 11:30	1
pH	**8.0**		0.2	0.2	SU			07/25/19 13:16	1

Client Sample ID: 1896V2-59-B01-2 Dup

Date Collected: 07/23/19 11:20
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-3

Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Acetone	**0.0093**	**J**	0.017	0.0073	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*07/24/19 16:30*	*07/27/19 01:41*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*07/24/19 16:30*	*07/27/19 01:41*	*1*
Dibromofluoromethane	*112*		*75 - 126*	*07/24/19 16:30*	*07/27/19 01:41*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/24/19 16:30*	*07/27/19 01:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B01-2 Dup
Date Collected: 07/23/19 11:20
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-3
Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2-Methylnaphthalene	**0.014**	**J**	0.076	0.0069	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.037	0.012	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Chrysene	**0.018**	**J**	0.037	0.010	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1

Client Sample ID: 1896V2-59-B01-2 Dup

Date Collected: 07/23/19 11:20
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-3

Matrix: Solid
Percent Solids: 85.5

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	<0.037		0.037	0.0097	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Phenanthrene	**0.032**	**J**	0.037	0.0052	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1
Pyrene	**0.015**	**J**	0.037	0.0074	mg/Kg	☼	07/24/19 16:14	07/26/19 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*31 - 143*	*07/24/19 16:14*	*07/26/19 15:43*	*1*
2-Fluorobiphenyl	*94*		*43 - 145*	*07/24/19 16:14*	*07/26/19 15:43*	*1*
2-Fluorophenol	*117*		*31 - 166*	*07/24/19 16:14*	*07/26/19 15:43*	*1*
Nitrobenzene-d5	*79*		*37 - 147*	*07/24/19 16:14*	*07/26/19 15:43*	*1*
Phenol-d5	*108*		*30 - 153*	*07/24/19 16:14*	*07/26/19 15:43*	*1*
Terphenyl-d14	*123*		*42 - 157*	*07/24/19 16:14*	*07/26/19 15:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.49**	**J**	1.1	0.21	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Arsenic	**6.6**		0.54	0.18	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Barium	**38**		0.54	0.062	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Beryllium	**0.61**		0.22	0.050	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Boron	**15**		2.7	0.25	mg/Kg	☼	07/25/19 08:17	07/26/19 14:37	1
Cadmium	**0.23**	**B**	0.11	0.019	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Calcium	**71000**	**B**	54	9.2	mg/Kg	☼	07/25/19 08:17	07/26/19 14:41	5
Chromium	**17**		0.54	0.27	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Cobalt	**11**		0.27	0.071	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Copper	**21**		0.54	0.15	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Iron	**18000**		11	5.6	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Lead	**11**		0.27	0.12	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Magnesium	**31000**		5.4	2.7	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Manganese	**390**		0.54	0.078	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Nickel	**28**		0.54	0.16	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Potassium	**3500**		27	9.6	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Selenium	**0.62**		0.54	0.32	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Silver	**2.4**		0.27	0.070	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Sodium	**230**		54	8.0	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Thallium	**0.71**		0.54	0.27	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Vanadium	**21**		0.27	0.064	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	1
Zinc	**51**		1.1	0.47	mg/Kg	☼	07/25/19 08:17	07/25/19 23:58	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		07/27/19 15:43	07/30/19 02:54	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:54	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:43	07/30/19 02:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:43	07/30/19 02:54	1

Client Sample ID: 1896V2-59-B01-2 Dup

Date Collected: 07/23/19 11:20
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-3

Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.6**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:54	1
Nickel	**0.031**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:54	1

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		07/26/19 14:43	07/29/19 11:17	1
Barium	**0.37**	**J**	0.50	0.050	mg/L		07/26/19 14:43	07/29/19 11:17	1
Beryllium	**0.0054**		0.0040	0.0040	mg/L		07/26/19 14:43	07/29/19 11:17	1
Boron	**0.21**		0.10	0.050	mg/L		07/26/19 14:43	07/29/19 11:17	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:43	07/29/19 11:17	1
Calcium	**49**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:17	1
Chromium	**0.14**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:17	1
Cobalt	**0.039**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:17	1
Iron	**100**		0.40	0.20	mg/L		07/26/19 14:43	07/29/19 11:17	1
Lead	**0.063**		0.0075	0.0075	mg/L		07/26/19 14:43	07/29/19 11:17	1
Manganese	**0.64**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:17	1
Nickel	**0.12**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:17	1
Potassium	**40**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:17	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:43	07/29/19 11:17	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:17	1
Zinc	**0.55**	**B**	0.50	0.020	mg/L		07/26/19 14:43	07/29/19 11:17	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		07/26/19 14:43	08/01/19 14:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:43	07/31/19 19:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		07/26/19 15:35	07/29/19 10:19	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	☼	08/01/19 13:00	08/02/19 07:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.41		0.41	0.20	mg/Kg	☼	08/05/19 13:00	08/06/19 11:30	1
pH	**8.6**		0.2	0.2	SU			07/25/19 13:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B02-1
Date Collected: 07/23/19 11:30
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-4
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 134*	*07/24/19 16:30*	*07/27/19 02:07*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*07/24/19 16:30*	*07/27/19 02:07*	*1*
Dibromofluoromethane	*109*		*75 - 126*	*07/24/19 16:30*	*07/27/19 02:07*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*07/24/19 16:30*	*07/27/19 02:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1

Client Sample ID: 1896V2-59-B02-1
Date Collected: 07/23/19 11:30
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-4
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1

Client Sample ID: 1896V2-59-B02-1
Date Collected: 07/23/19 11:30
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-4
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	07/24/19 16:14	07/26/19 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*31 - 143*	*07/24/19 16:14*	*07/26/19 14:15*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*07/24/19 16:14*	*07/26/19 14:15*	*1*
2-Fluorophenol	*100*		*31 - 166*	*07/24/19 16:14*	*07/26/19 14:15*	*1*
Nitrobenzene-d5	*66*		*37 - 147*	*07/24/19 16:14*	*07/26/19 14:15*	*1*
Phenol-d5	*90*		*30 - 153*	*07/24/19 16:14*	*07/26/19 14:15*	*1*
Terphenyl-d14	*119*		*42 - 157*	*07/24/19 16:14*	*07/26/19 14:15*	*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	☼	07/25/19 08:17	07/26/19 00:02	1
Arsenic	**7.5**		0.58	0.20	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Barium	**35**		0.58	0.066	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Beryllium	**0.45**		0.23	0.054	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Boron	**9.2**		2.9	0.27	mg/Kg	☼	07/25/19 08:17	07/26/19 14:45	1
Cadmium	**0.20**	**B**	0.12	0.021	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Calcium	**49000**	**B**	58	9.9	mg/Kg	☼	07/25/19 08:17	07/26/19 15:02	5
Chromium	**13**		0.58	0.29	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Cobalt	**12**		0.29	0.076	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Copper	**20**		0.58	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Iron	**15000**		12	6.1	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Lead	**13**		0.29	0.13	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Magnesium	**23000**		5.8	2.9	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Manganese	**510**		0.58	0.085	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Nickel	**27**		0.58	0.17	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Potassium	**2000**		29	10	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Silver	**2.7**		0.29	0.075	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Sodium	**250**		58	8.6	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Thallium	**0.60**		0.58	0.29	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Vanadium	**19**		0.29	0.069	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	1
Zinc	**59**		1.2	0.51	mg/Kg	☼	07/25/19 08:17	07/26/19 00:02	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		07/27/19 15:43	07/30/19 02:58	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:58	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:43	07/30/19 02:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:43	07/30/19 02:58	1

Client Sample ID: 1896V2-59-B02-1

Date Collected: 07/23/19 11:30
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-4

Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.67**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:58	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 02:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.036**	**J**	0.050	0.010	mg/L		07/26/19 14:43	07/29/19 11:21	1
Barium	**0.45**	**J**	0.50	0.050	mg/L		07/26/19 14:43	07/29/19 11:21	1
Beryllium	**0.0062**		0.0040	0.0040	mg/L		07/26/19 14:43	07/29/19 11:21	1
Boron	**0.14**		0.10	0.050	mg/L		07/26/19 14:43	07/29/19 11:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:43	07/29/19 11:21	1
Calcium	**20**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:21	1
Chromium	**0.13**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:21	1
Cobalt	**0.024**	**J**	0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:21	1
Iron	**110**		0.40	0.20	mg/L		07/26/19 14:43	07/29/19 11:21	1
Lead	**0.039**		0.0075	0.0075	mg/L		07/26/19 14:43	07/29/19 11:21	1
Manganese	**0.46**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:21	1
Nickel	**0.12**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:21	1
Potassium	**24**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:21	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:43	07/29/19 11:21	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:21	1
Zinc	**0.31**	**J B**	0.50	0.020	mg/L		07/26/19 14:43	07/29/19 11:21	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		07/27/19 15:43	08/01/19 18:30	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		07/26/19 14:43	08/01/19 14:50	1
Thallium	**0.0026**		0.0020	0.0020	mg/L		07/26/19 14:43	07/31/19 19:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		07/26/19 15:35	07/29/19 10:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.019	0.0065	mg/Kg	☼	08/01/19 13:00	08/02/19 07:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	08/05/19 13:00	08/06/19 11:31	1
pH	**8.5**		0.2	0.2	SU			07/25/19 13:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B02-2
Date Collected: 07/23/19 11:35
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-5
Matrix: Solid
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	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Acetone	**0.0086**	**J**	0.015	0.0064	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Methylene Chloride	<0.0037		0.0037	0.0014	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 134*	*07/24/19 16:30*	*07/27/19 02:32*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*07/24/19 16:30*	*07/27/19 02:32*	*1*
Dibromofluoromethane	*114*		*75 - 126*	*07/24/19 16:30*	*07/27/19 02:32*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*07/24/19 16:30*	*07/27/19 02:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1

Client Sample ID: 1896V2-59-B02-2
Date Collected: 07/23/19 11:35
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-5
Matrix: Solid
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	<0.38		0.38	0.086	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.038	0.012	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Chrysene	**0.018**	**J**	0.038	0.010	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1

Client Sample ID: 1896V2-59-B02-2
Date Collected: 07/23/19 11:35
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-5
Matrix: Solid
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	<0.038		0.038	0.0098	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1
Pyrene	**0.010**	**J**	0.038	0.0075	mg/Kg	☼	07/24/19 16:14	07/26/19 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*31 - 143*	*07/24/19 16:14*	*07/26/19 14:44*	*1*
2-Fluorobiphenyl	*90*		*43 - 145*	*07/24/19 16:14*	*07/26/19 14:44*	*1*
2-Fluorophenol	*104*		*31 - 166*	*07/24/19 16:14*	*07/26/19 14:44*	*1*
Nitrobenzene-d5	*73*		*37 - 147*	*07/24/19 16:14*	*07/26/19 14:44*	*1*
Phenol-d5	*94*		*30 - 153*	*07/24/19 16:14*	*07/26/19 14:44*	*1*
Terphenyl-d14	*116*		*42 - 157*	*07/24/19 16:14*	*07/26/19 14:44*	*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	☼	07/25/19 08:17	07/26/19 00:06	1
Arsenic	**12**		0.57	0.20	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Barium	**33**		0.57	0.065	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Beryllium	**0.54**		0.23	0.054	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Boron	**13**		2.9	0.27	mg/Kg	☼	07/25/19 08:17	07/26/19 15:06	1
Cadmium	**0.28**	**B**	0.11	0.021	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Calcium	**71000**	**B**	57	9.7	mg/Kg	☼	07/25/19 08:17	07/26/19 15:10	5
Chromium	**13**		0.57	0.28	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Cobalt	**13**		0.29	0.075	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Copper	**29**		0.57	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Iron	**19000**		11	6.0	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Lead	**14**		0.29	0.13	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Magnesium	**41000**		29	14	mg/Kg	☼	07/25/19 08:17	07/26/19 15:10	5
Manganese	**450**		0.57	0.083	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Nickel	**29**		0.57	0.17	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Potassium	**2800**		29	10	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Selenium	**0.43**	**J**	0.57	0.34	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Silver	**2.4**		0.29	0.074	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Sodium	**280**		57	8.5	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Thallium	**0.51**	**J**	0.57	0.29	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Vanadium	**17**		0.29	0.068	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	1
Zinc	**63**		1.1	0.50	mg/Kg	☼	07/25/19 08:17	07/26/19 00:06	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		07/27/19 15:43	07/30/19 03:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:43	07/30/19 03:03	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 03:03	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:43	07/30/19 03:03	1

Client Sample ID: 1896V2-59-B02-2
Date Collected: 07/23/19 11:35
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-5
Matrix: Solid
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		07/27/19 15:43	07/30/19 03:03	1
Manganese	**1.0**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 03:03	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 03:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.051**		0.050	0.010	mg/L		07/26/19 14:43	07/29/19 11:25	1
Barium	**0.33**	**J**	0.50	0.050	mg/L		07/26/19 14:43	07/29/19 11:25	1
Beryllium	**0.0046**		0.0040	0.0040	mg/L		07/26/19 14:43	07/29/19 11:25	1
Boron	**0.18**		0.10	0.050	mg/L		07/26/19 14:43	07/29/19 11:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:43	07/29/19 11:25	1
Calcium	**32**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:25	1
Chromium	**0.11**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:25	1
Cobalt	**0.033**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:25	1
Iron	**110**		0.40	0.20	mg/L		07/26/19 14:43	07/29/19 11:25	1
Lead	**0.054**		0.0075	0.0075	mg/L		07/26/19 14:43	07/29/19 11:25	1
Manganese	**0.42**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:25	1
Nickel	**0.13**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:25	1
Potassium	**32**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:25	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:43	07/29/19 11:25	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:25	1
Zinc	**0.45**	**J B**	0.50	0.020	mg/L		07/26/19 14:43	07/29/19 11:25	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		07/27/19 15:43	08/01/19 18:34	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		07/26/19 14:43	08/01/19 14:51	1
Thallium	**0.0021**		0.0020	0.0020	mg/L		07/26/19 14:43	07/31/19 19:08	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		07/26/19 15:35	07/29/19 10:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.018	0.0060	mg/Kg	☼	08/01/19 13:00	08/02/19 07:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	08/05/19 13:00	08/06/19 11:31	1
pH	**8.3**		0.2	0.2	SU			07/25/19 13:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B03-1
Date Collected: 07/23/19 11:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-6
Matrix: Solid
Percent Solids: 86.4

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	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Acetone	**0.013**	**J**	0.015	0.0065	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/24/19 16:30*	*07/27/19 02:58*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*	*07/24/19 16:30*	*07/27/19 02:58*	*1*
Dibromofluoromethane	*109*		*75 - 126*	*07/24/19 16:30*	*07/27/19 02:58*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*07/24/19 16:30*	*07/27/19 02:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B03-1
Date Collected: 07/23/19 11:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-6
Matrix: Solid
Percent Solids: 86.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B03-1
Date Collected: 07/23/19 11:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-6
Matrix: Solid
Percent Solids: 86.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	07/24/19 16:14	07/25/19 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*31 - 143*	*07/24/19 16:14*	*07/25/19 15:34*	*1*
2-Fluorobiphenyl	*94*		*43 - 145*	*07/24/19 16:14*	*07/25/19 15:34*	*1*
2-Fluorophenol	*110*		*31 - 166*	*07/24/19 16:14*	*07/25/19 15:34*	*1*
Nitrobenzene-d5	*81*		*37 - 147*	*07/24/19 16:14*	*07/25/19 15:34*	*1*
Phenol-d5	*106*		*30 - 153*	*07/24/19 16:14*	*07/25/19 15:34*	*1*
Terphenyl-d14	*131*		*42 - 157*	*07/24/19 16:14*	*07/25/19 15:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.42**	**J**	1.1	0.22	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Arsenic	**7.5**		0.56	0.19	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Barium	**38**		0.56	0.064	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Beryllium	**0.41**		0.23	0.053	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Boron	**11**		2.8	0.26	mg/Kg	☼	07/25/19 08:17	07/26/19 15:14	1
Cadmium	**0.24**	**B**	0.11	0.020	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Calcium	**49000**	**B**	56	9.5	mg/Kg	☼	07/25/19 08:17	07/26/19 15:18	5
Chromium	**13**		0.56	0.28	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Cobalt	**9.3**		0.28	0.074	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Copper	**20**		0.56	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Iron	**16000**		11	5.9	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Lead	**12**		0.28	0.13	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Magnesium	**24000**		5.6	2.8	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Manganese	**560**		0.56	0.082	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Nickel	**23**		0.56	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Potassium	**2200**		28	10	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Selenium	**0.33**	**J**	0.56	0.33	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Silver	**2.4**		0.28	0.073	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Sodium	**170**		56	8.3	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Thallium	**0.69**		0.56	0.28	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Vanadium	**20**		0.28	0.066	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1
Zinc	**69**		1.1	0.49	mg/Kg	☼	07/25/19 08:17	07/26/19 00:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.23**	**J**	0.40	0.20	mg/L		07/27/19 15:43	07/30/19 03:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:43	07/30/19 03:07	1
Manganese	**0.53**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 03:07	1

Client Sample ID: 1896V2-59-B03-1
Date Collected: 07/23/19 11:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-6
Matrix: Solid
Percent Solids: 86.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.021**	**J**	0.050	0.010	mg/L		07/26/19 14:43	07/29/19 11:29	1
Barium	**0.19**	**J**	0.50	0.050	mg/L		07/26/19 14:43	07/29/19 11:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/26/19 14:43	07/29/19 11:29	1
Boron	**0.099**	**J**	0.10	0.050	mg/L		07/26/19 14:43	07/29/19 11:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:43	07/29/19 11:29	1
Calcium	**14**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:29	1
Chromium	**0.066**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:29	1
Cobalt	**0.015**	**J**	0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:29	1
Iron	**58**		0.40	0.20	mg/L		07/26/19 14:43	07/29/19 11:29	1
Lead	**0.028**		0.0075	0.0075	mg/L		07/26/19 14:43	07/29/19 11:29	1
Manganese	**0.35**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:29	1
Nickel	**0.056**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:29	1
Potassium	**16**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:29	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:43	07/29/19 11:29	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:29	1
Zinc	**0.19**	**J B**	0.50	0.020	mg/L		07/26/19 14:43	07/29/19 11:29	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		07/26/19 14:43	08/01/19 14:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:43	07/31/19 19:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/26/19 15:35	07/29/19 10:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0077**	**J**	0.019	0.0062	mg/Kg	☼	08/01/19 13:00	08/02/19 07:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.24	mg/Kg	☼	08/05/19 13:00	08/06/19 11:31	1
pH	**8.5**		0.2	0.2	SU			07/25/19 13:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B03-2
Date Collected: 07/23/19 11:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-7
Matrix: Solid
Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Acetone	**0.0073**	**J**	0.016	0.0069	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*07/24/19 16:30*	*07/27/19 03:23*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*07/24/19 16:30*	*07/27/19 03:23*	*1*
Dibromofluoromethane	*108*		*75 - 126*	*07/24/19 16:30*	*07/27/19 03:23*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*07/24/19 16:30*	*07/27/19 03:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1

Client Sample ID: 1896V2-59-B03-2
Date Collected: 07/23/19 11:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-7
Matrix: Solid
Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Benzo[b]fluoranthene	**0.0091**	**J**	0.039	0.0085	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167183-1

Client Sample ID: 1896V2-59-B03-2
Date Collected: 07/23/19 11:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-7
Matrix: Solid
Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	07/24/19 16:14	07/25/19 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*70*		*31 - 143*	*07/24/19 16:14*	*07/25/19 16:04*	*1*
2-Fluorobiphenyl	*93*		*43 - 145*	*07/24/19 16:14*	*07/25/19 16:04*	*1*
2-Fluorophenol	*102*		*31 - 166*	*07/24/19 16:14*	*07/25/19 16:04*	*1*
Nitrobenzene-d5	*77*		*37 - 147*	*07/24/19 16:14*	*07/25/19 16:04*	*1*
Phenol-d5	*95*		*30 - 153*	*07/24/19 16:14*	*07/25/19 16:04*	*1*
Terphenyl-d14	*118*		*42 - 157*	*07/24/19 16:14*	*07/25/19 16:04*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.23**	**J**	1.2	0.23	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Arsenic	**7.1**		0.59	0.20	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Barium	**53**		0.59	0.067	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Beryllium	**0.71**		0.24	0.055	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Boron	**15**		2.9	0.27	mg/Kg	☼	07/25/19 08:17	07/26/19 15:22	1
Cadmium	**0.24**	**B**	0.12	0.021	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Calcium	**78000**	**B**	59	10	mg/Kg	☼	07/25/19 08:17	07/26/19 15:26	5
Chromium	**19**		0.59	0.29	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Cobalt	**15**		0.29	0.077	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Copper	**23**		0.59	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Iron	**19000**		12	6.1	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Lead	**14**		0.29	0.14	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Magnesium	**32000**		5.9	2.9	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Manganese	**490**		0.59	0.085	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Nickel	**32**		0.59	0.17	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Potassium	**3500**		29	10	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Selenium	**0.49**	**J**	0.59	0.35	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Silver	**2.8**		0.29	0.076	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Sodium	**250**		59	8.7	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Thallium	**0.80**		0.59	0.29	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Vanadium	**24**		0.29	0.069	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	1
Zinc	**62**		1.2	0.52	mg/Kg	☼	07/25/19 08:17	07/26/19 00:14	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		07/27/19 15:43	07/30/19 03:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:43	07/30/19 03:11	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 03:11	1
Iron	<0.40		0.40	0.20	mg/L		07/27/19 15:43	07/30/19 03:11	1

Client Sample ID: 1896V2-59-B03-2
Date Collected: 07/23/19 11:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167183-7
Matrix: Solid
Percent Solids: 83.6

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		07/27/19 15:43	07/30/19 11:16	1
Manganese	**0.11**		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 03:11	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:43	07/30/19 03:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.051**		0.050	0.010	mg/L		07/26/19 14:43	07/29/19 11:33	1
Barium	**0.57**		0.50	0.050	mg/L		07/26/19 14:43	07/29/19 11:33	1
Beryllium	**0.0082**		0.0040	0.0040	mg/L		07/26/19 14:43	07/29/19 11:33	1
Boron	**0.28**		0.10	0.050	mg/L		07/26/19 14:43	07/29/19 11:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:43	07/29/19 11:33	1
Calcium	**53**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:33	1
Chromium	**0.18**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:33	1
Cobalt	**0.046**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:33	1
Iron	**150**		0.40	0.20	mg/L		07/26/19 14:43	07/29/19 11:33	1
Lead	**0.067**		0.0075	0.0075	mg/L		07/26/19 14:43	07/29/19 11:33	1
Manganese	**0.61**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:33	1
Nickel	**0.17**		0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:33	1
Potassium	**50**		2.5	0.50	mg/L		07/26/19 14:43	07/29/19 11:33	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:43	07/29/19 11:33	1
Silver	**0.011**	**J**	0.025	0.010	mg/L		07/26/19 14:43	07/29/19 11:33	1
Zinc	**0.44**	**J B**	0.50	0.020	mg/L		07/26/19 14:43	07/29/19 11:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:43	08/01/19 18:38	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		07/26/19 14:43	08/01/19 14:53	1
Thallium	**0.0034**		0.0020	0.0020	mg/L		07/26/19 14:43	07/31/19 19:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		07/26/19 15:35	07/29/19 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J**	0.018	0.0060	mg/Kg	☼	08/01/19 13:00	08/02/19 07:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.26	mg/Kg	☼	08/05/19 13:00	08/06/19 11:32	1
pH	**8.7**		0.2	0.2	SU			07/25/19 13:23	1

Definitions/Glossary

Client: Andrews Engineering Inc. Job ID: 500-167183-1
Project/Site: IDOT - AE7-22A

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
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
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.
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.
¤	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 - AE7-22A

Job ID: 500-167183-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-20

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

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

500-167183 COC

Client Contact	Laboratory
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 Name: AE7-22A

Project No.: PTB/WO: 184-006/22A

TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other

Sampler: Joshua Ivey

COC No.: 1 of 1

Lab Job No.: 500-167183

Sample Temp: 0.6, 2.8, 4.8, 4.0

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.

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: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	1896V2-59-B01-1	7-23	1110	S	X	X					X	X	X	X	X					
2	1896V2-59-B01-2		1115																	
3	1896V2-59-B01-2 Dup		1120																	
4	1896V2-59-B02-1		1130																	
5	1896V2-59-B02-2		1135																	
6	1896V2-59-B03-1		1145																	
7	1896V2-59-B03-2		1150																	
8	1896V2-59-B04-1		1155																	
9	1896V2-59-B04-2		1200																	
~~10~~	~~TRIP~~																			
10	Trip Blank #1	7/23			X															

Relinquished by:	Date/Time 7/23/19 4:30pm	Received by:	Date/Time 7/23/19 4:30Pm
Relinquished by:	Date/Time 7-24-19 0905	Received by:	Date/Time 7/24/19 0905
Relinquished by:	Date/Time 7/24/19 1045	Received by:	Date/Time

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 346 (US 41/North Skokie Highway) Office Phone Number, if available:

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

City: Lake Bluff State: IL Zip Code: 60044

County: Cook Township: Shields

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

Latitude: 42.27942 (Decimal Degrees) Longitude: -87.86944 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: 0970505131 BOW: BOA:

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

Estimated Volume of debris (cu. Yd.): 426

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.

Project Name: FAP 346 (US 41/North Skokie Highway) Latitude: 42.27942 Longitude: - 87.86944

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 1896V2-60-B01 AND 1896V2-60-B03 WERE SAMPLED ADJACENT TO SITE 1896V3-60. SEE TABLE 3f 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: 500-167185-1.

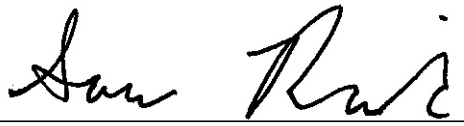
IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

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:

Jul 1, 2024
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
1,1,2,2-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 1896V3-60

Knauz Mercedes Dealership

Sample ID	1896V2-60-B01-1	1896V2-60-B01-2	1896V2-60-B03-1	1896V2-60-B03-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7.5	7.5-15	0-7	7-14					
Sample Date	7/23/2019	7/23/2019	7/23/2019	7/23/2019					
PID	0	0	0	0					
Sample pH	8.6	8.1	8.4	8.5	[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
Matrix	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.									

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 500-167185-1
Client Project/Site: IDOT - AE7-22A

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/6/2019 3:48:54 PM

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

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B01-1
Date Collected: 07/23/19 10:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-1
Matrix: Solid
Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/24/19 16:30	07/28/19 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 134*	*07/24/19 16:30*	*07/28/19 01:10*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*07/24/19 16:30*	*07/28/19 01:10*	*1*
Dibromofluoromethane	*113*		*75 - 126*	*07/24/19 16:30*	*07/28/19 01:10*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*07/24/19 16:30*	*07/28/19 01:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B01-1
Date Collected: 07/23/19 10:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-1
Matrix: Solid
Percent Solids: 87.6

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	☼	07/26/19 07:55	07/30/19 12:49	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Hexachlorocyclopentadiene	<0.76	F1	0.76	0.22	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1

Client Sample ID: 1896V2-60-B01-1
Date Collected: 07/23/19 10:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-1
Matrix: Solid
Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	07/26/19 07:55	07/30/19 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*31 - 143*	*07/26/19 07:55*	*07/30/19 12:49*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*07/26/19 07:55*	*07/30/19 12:49*	*1*
2-Fluorophenol	*113*		*31 - 166*	*07/26/19 07:55*	*07/30/19 12:49*	*1*
Nitrobenzene-d5	*77*		*37 - 147*	*07/26/19 07:55*	*07/30/19 12:49*	*1*
Phenol-d5	*92*		*30 - 153*	*07/26/19 07:55*	*07/30/19 12:49*	*1*
Terphenyl-d14	*101*		*42 - 157*	*07/26/19 07:55*	*07/30/19 12:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.35**	**J**	1.1	0.22	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Arsenic	**5.1**		0.57	0.19	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Barium	**21**		0.57	0.065	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Beryllium	**0.39**		0.23	0.053	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Boron	**9.3**		2.8	0.27	mg/Kg	☼	07/25/19 08:16	07/26/19 22:04	1
Cadmium	**1.0**	**B**	0.11	0.020	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Calcium	**51000**	**B**	57	9.6	mg/Kg	☼	07/25/19 08:16	07/26/19 22:08	5
Chromium	**13**		0.57	0.28	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Cobalt	**8.5**		0.28	0.075	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Copper	**19**		0.57	0.16	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Iron	**14000**		11	5.9	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Lead	**9.8**		0.28	0.13	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Magnesium	**22000**		5.7	2.8	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Manganese	**350**		0.57	0.083	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Nickel	**21**		0.57	0.17	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Potassium	**1800**		28	10	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Selenium	**0.33**	**J B**	0.57	0.33	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Silver	**2.2**		0.28	0.073	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Sodium	**200**		57	8.4	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Thallium	**0.37**	**J**	0.57	0.28	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Vanadium	**20**		0.28	0.067	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	1
Zinc	**50**		1.1	0.50	mg/Kg	☼	07/25/19 08:16	07/25/19 21:55	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		07/27/19 15:44	07/30/19 03:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:44	07/30/19 03:55	1
Manganese	**0.46**		0.025	0.010	mg/L		07/27/19 15:44	07/30/19 03:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B01-1
Date Collected: 07/23/19 10:10
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-1
Matrix: Solid
Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.019**	**J**	0.050	0.010	mg/L		07/26/19 14:46	07/30/19 00:53	1
Barium	**0.20**	**J**	0.50	0.050	mg/L		07/26/19 14:46	07/30/19 00:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/26/19 14:46	07/30/19 00:53	1
Boron	**0.17**		0.10	0.050	mg/L		07/26/19 14:46	07/30/19 00:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:46	07/30/19 00:53	1
Calcium	**15**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 00:53	1
Chromium	**0.069**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:53	1
Cobalt	**0.014**	**J**	0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:53	1
Iron	**55**		0.40	0.20	mg/L		07/26/19 14:46	07/30/19 00:53	1
Lead	**0.030**		0.0075	0.0075	mg/L		07/26/19 14:46	07/30/19 00:53	1
Manganese	**0.22**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:53	1
Nickel	**0.053**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 14:17	1
Potassium	**19**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 00:53	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:46	07/30/19 00:53	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:53	1
Zinc	**0.46**	**J B**	0.50	0.020	mg/L		07/26/19 14:46	07/30/19 00:53	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		07/26/19 14:46	08/01/19 15:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:46	07/31/19 19:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/29/19 11:10	07/30/19 08:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.018	0.0059	mg/Kg	☼	07/31/19 15:40	08/01/19 09:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	08/01/19 13:45	08/01/19 16:38	1
pH	**8.6**		0.2	0.2	SU			07/25/19 13:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B01-2
Date Collected: 07/23/19 10:15
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-2
Matrix: Solid
Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Acetone	**0.012**	**J**	0.017	0.0074	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	07/24/19 16:30	07/28/19 01:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*07/24/19 16:30*	*07/28/19 01:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*07/24/19 16:30*	*07/28/19 01:36*	*1*
Dibromofluoromethane	*111*		*75 - 126*	*07/24/19 16:30*	*07/28/19 01:36*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*07/24/19 16:30*	*07/28/19 01:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1

Client Sample ID: 1896V2-60-B01-2
Date Collected: 07/23/19 10:15
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-2
Matrix: Solid
Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.038	0.012	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1

Client Sample ID: 1896V2-60-B01-2
Date Collected: 07/23/19 10:15
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-2
Matrix: Solid
Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Phenanthrene	**0.032**	**J**	0.038	0.0053	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1
Pyrene	**0.011**	**J**	0.038	0.0075	mg/Kg	☼	07/26/19 07:55	07/30/19 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*31 - 143*	*07/26/19 07:55*	*07/30/19 13:18*	*1*
2-Fluorobiphenyl	*87*		*43 - 145*	*07/26/19 07:55*	*07/30/19 13:18*	*1*
2-Fluorophenol	*122*		*31 - 166*	*07/26/19 07:55*	*07/30/19 13:18*	*1*
Nitrobenzene-d5	*86*		*37 - 147*	*07/26/19 07:55*	*07/30/19 13:18*	*1*
Phenol-d5	*97*		*30 - 153*	*07/26/19 07:55*	*07/30/19 13:18*	*1*
Terphenyl-d14	*99*		*42 - 157*	*07/26/19 07:55*	*07/30/19 13:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.26**	**J**	1.1	0.21	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Arsenic	**6.0**		0.53	0.18	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Barium	**40**		0.53	0.061	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Beryllium	**0.63**		0.21	0.050	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Boron	**15**		2.7	0.25	mg/Kg	☼	07/25/19 08:16	07/26/19 22:12	1
Cadmium	**0.35**	**B**	0.11	0.019	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Calcium	**73000**	**B**	53	9.0	mg/Kg	☼	07/25/19 08:16	07/26/19 22:16	5
Chromium	**16**		0.53	0.26	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Cobalt	**12**		0.27	0.070	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Copper	**22**		0.53	0.15	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Iron	**17000**		11	5.5	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Lead	**11**		0.27	0.12	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Magnesium	**31000**		5.3	2.6	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Manganese	**420**		0.53	0.077	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Nickel	**28**		0.53	0.16	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Potassium	**3500**		27	9.4	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Selenium	**0.48**	**J B**	0.53	0.31	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Silver	**2.4**		0.27	0.069	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Sodium	**240**		53	7.9	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Thallium	**0.71**		0.53	0.27	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Vanadium	**20**		0.27	0.063	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	1
Zinc	**52**		1.1	0.47	mg/Kg	☼	07/25/19 08:16	07/25/19 21:59	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		07/27/19 15:44	07/30/19 04:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:44	07/30/19 04:00	1
Manganese	**2.2**		0.025	0.010	mg/L		07/27/19 15:44	07/30/19 04:00	1

Client Sample ID: 1896V2-60-B01-2 **Lab Sample ID: 500-167185-2**
Date Collected: 07/23/19 10:15 **Matrix: Solid**
Date Received: 07/24/19 10:00 **Percent Solids: 85.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/26/19 14:46	07/30/19 00:57	1
Barium	**0.087**	**J**	0.50	0.050	mg/L		07/26/19 14:46	07/30/19 00:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/26/19 14:46	07/30/19 00:57	1
Boron	**0.065**	**J**	0.10	0.050	mg/L		07/26/19 14:46	07/30/19 00:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:46	07/30/19 00:57	1
Calcium	**21**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 00:57	1
Chromium	**0.027**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:57	1
Cobalt	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:57	1
Iron	**14**		0.40	0.20	mg/L		07/26/19 14:46	07/30/19 00:57	1
Lead	**0.012**		0.0075	0.0075	mg/L		07/26/19 14:46	07/30/19 00:57	1
Manganese	**0.16**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:57	1
Nickel	**0.017**	**J ^**	0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:57	1
Potassium	**12**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 00:57	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:46	07/30/19 00:57	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 00:57	1
Zinc	**0.047**	**J B**	0.50	0.020	mg/L		07/26/19 14:46	07/30/19 00:57	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		07/26/19 14:46	08/01/19 15:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:46	07/31/19 19:22	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		07/29/19 11:10	07/30/19 09:29	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	☼	07/31/19 15:40	08/01/19 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	08/01/19 13:45	08/01/19 16:39	1
pH	**8.1**		0.2	0.2	SU			07/25/19 13:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B03-1
Date Collected: 07/23/19 10:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-6
Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	07/24/19 16:30	07/28/19 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*07/24/19 16:30*	*07/28/19 03:19*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*	*07/24/19 16:30*	*07/28/19 03:19*	*1*
Dibromofluoromethane	*114*		*75 - 126*	*07/24/19 16:30*	*07/28/19 03:19*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*07/24/19 16:30*	*07/28/19 03:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B03-1
Date Collected: 07/23/19 10:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-6
Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B03-1
Date Collected: 07/23/19 10:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-6
Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	07/26/19 07:55	07/29/19 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*31 - 143*	*07/26/19 07:55*	*07/29/19 19:30*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*07/26/19 07:55*	*07/29/19 19:30*	*1*
2-Fluorophenol	*99*		*31 - 166*	*07/26/19 07:55*	*07/29/19 19:30*	*1*
Nitrobenzene-d5	*65*		*37 - 147*	*07/26/19 07:55*	*07/29/19 19:30*	*1*
Phenol-d5	*85*		*30 - 153*	*07/26/19 07:55*	*07/29/19 19:30*	*1*
Terphenyl-d14	*103*		*42 - 157*	*07/26/19 07:55*	*07/29/19 19:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.40**	**J**	1.2	0.23	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Arsenic	**7.3**		0.59	0.20	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Barium	**55**		0.59	0.067	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Beryllium	**0.71**		0.24	0.055	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Boron	**15**		2.9	0.27	mg/Kg	☼	07/25/19 08:16	07/26/19 22:52	1
Cadmium	**0.29**	**B**	0.12	0.021	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Calcium	**64000**	**B**	59	10	mg/Kg	☼	07/25/19 08:16	07/26/19 22:56	5
Chromium	**18**		0.59	0.29	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Cobalt	**13**		0.29	0.077	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Copper	**22**		0.59	0.16	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Iron	**19000**		12	6.1	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Lead	**12**		0.29	0.14	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Magnesium	**25000**		5.9	2.9	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Manganese	**510**		0.59	0.085	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Nickel	**31**		0.59	0.17	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Potassium	**3100**		29	10	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Selenium	**0.36**	**J B**	0.59	0.35	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Silver	**2.9**		0.29	0.076	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Sodium	**150**		59	8.7	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Thallium	**0.72**		0.59	0.29	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Vanadium	**25**		0.29	0.069	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	1
Zinc	**58**		1.2	0.52	mg/Kg	☼	07/25/19 08:16	07/25/19 22:27	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		07/27/19 15:44	07/30/19 04:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:44	07/30/19 04:25	1

Client Sample ID: 1896V2-60-B03-1 **Lab Sample ID: 500-167185-6**
Date Collected: 07/23/19 10:50 **Matrix: Solid**
Date Received: 07/24/19 10:00 **Percent Solids: 84.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		07/26/19 14:46	07/30/19 01:25	1
Barium	**0.058**	**J**	0.50	0.050	mg/L		07/26/19 14:46	07/30/19 01:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/26/19 14:46	07/30/19 01:25	1
Boron	<0.10		0.10	0.050	mg/L		07/26/19 14:46	07/30/19 01:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:46	07/30/19 01:25	1
Calcium	**11**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 01:25	1
Chromium	**0.017**	**J**	0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:25	1
Cobalt	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:25	1
Iron	**9.6**		0.40	0.20	mg/L		07/26/19 14:46	07/30/19 01:25	1
Lead	**0.0087**		0.0075	0.0075	mg/L		07/26/19 14:46	07/30/19 01:25	1
Manganese	**0.039**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:25	1
Nickel	<0.025	^	0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:25	1
Potassium	**5.8**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 01:25	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:46	07/30/19 01:25	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:25	1
Zinc	**0.032**	**J B ^**	0.50	0.020	mg/L		07/26/19 14:46	07/30/19 01:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/26/19 14:46	08/01/19 15:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:46	08/01/19 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/29/19 11:10	07/30/19 09:36	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	☼	07/31/19 15:40	08/01/19 09:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.30	mg/Kg	☼	08/01/19 13:45	08/01/19 16:40	1
pH	**8.4**		0.2	0.2	SU			07/25/19 13:35	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B03-2
Date Collected: 07/23/19 10:55
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-7
Matrix: Solid
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	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Acetone	**0.016**		0.015	0.0067	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Benzene	<0.0015		0.0015	0.00040	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Bromodichloromethane	<0.0015		0.0015	0.00032	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00069	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Vinyl chloride	<0.0015		0.0015	0.00069	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	07/24/19 16:30	07/28/19 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 134*	*07/24/19 16:30*	*07/28/19 03:44*	*1*
4-Bromofluorobenzene (Surr)	*118*		*75 - 131*	*07/24/19 16:30*	*07/28/19 03:44*	*1*
Dibromofluoromethane	*111*		*75 - 126*	*07/24/19 16:30*	*07/28/19 03:44*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*07/24/19 16:30*	*07/28/19 03:44*	*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	0.042	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

Client Sample ID: 1896V2-60-B03-2
Date Collected: 07/23/19 10:55
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-7
Matrix: Solid
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	☼	07/26/19 07:55	07/29/19 20:00	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1

Client Sample ID: 1896V2-60-B03-2
Date Collected: 07/23/19 10:55
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167185-7
Matrix: Solid
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	☼	07/26/19 07:55	07/29/19 20:00	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Phenanthrene	**0.011**	**J**	0.039	0.0055	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1
Pyrene	**0.0099**	**J**	0.039	0.0078	mg/Kg	☼	07/26/19 07:55	07/29/19 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*62*		*31 - 143*	*07/26/19 07:55*	*07/29/19 20:00*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*07/26/19 07:55*	*07/29/19 20:00*	*1*
2-Fluorophenol	*95*		*31 - 166*	*07/26/19 07:55*	*07/29/19 20:00*	*1*
Nitrobenzene-d5	*64*		*37 - 147*	*07/26/19 07:55*	*07/29/19 20:00*	*1*
Phenol-d5	*82*		*30 - 153*	*07/26/19 07:55*	*07/29/19 20:00*	*1*
Terphenyl-d14	*103*		*42 - 157*	*07/26/19 07:55*	*07/29/19 20:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.22	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Arsenic	**5.4**		0.56	0.19	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Barium	**36**		0.56	0.064	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Beryllium	**0.67**		0.22	0.052	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Boron	**18**	**F1**	2.8	0.26	mg/Kg	☼	07/25/19 08:16	07/26/19 23:00	1
Cadmium	**0.16**	**B**	0.11	0.020	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Calcium	**62000**	**B**	56	9.5	mg/Kg	☼	07/25/19 08:16	07/26/19 23:04	5
Chromium	**18**	**F1**	0.56	0.28	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Cobalt	**10**		0.28	0.074	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Copper	**21**		0.56	0.16	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Iron	**18000**		11	5.8	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Lead	**12**	**F1**	0.28	0.13	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Magnesium	**29000**		5.6	2.8	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Manganese	**360**		0.56	0.081	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Nickel	**29**		0.56	0.16	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Potassium	**3900**		28	9.9	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Selenium	**0.54**	**J B F1**	0.56	0.33	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Silver	**3.0**		0.28	0.072	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Sodium	**190**		56	8.3	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Thallium	**0.90**	**F1**	0.56	0.28	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Vanadium	**22**		0.28	0.066	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	1
Zinc	**51**		1.1	0.49	mg/Kg	☼	07/25/19 08:16	07/25/19 22:31	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		07/27/19 15:44	07/30/19 04:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:44	07/30/19 04:29	1
Manganese	**1.6**		0.025	0.010	mg/L		07/27/19 15:44	07/30/19 04:29	1

Client Sample ID: 1896V2-60-B03-2 **Lab Sample ID: 500-167185-7**
Date Collected: 07/23/19 10:55 **Matrix: Solid**
Date Received: 07/24/19 10:00 **Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.016**	**J**	0.050	0.010	mg/L		07/26/19 14:46	07/30/19 01:29	1
Barium	**0.21**	**J**	0.50	0.050	mg/L		07/26/19 14:46	07/30/19 01:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/26/19 14:46	07/30/19 01:29	1
Boron	**0.15**		0.10	0.050	mg/L		07/26/19 14:46	07/30/19 01:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:46	07/30/19 01:29	1
Calcium	**28**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 01:29	1
Chromium	**0.079**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:29	1
Cobalt	**0.027**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:29	1
Iron	**52**		0.40	0.20	mg/L		07/26/19 14:46	07/30/19 01:29	1
Lead	**0.036**		0.0075	0.0075	mg/L		07/26/19 14:46	07/30/19 01:29	1
Manganese	**0.44**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:29	1
Nickel	**0.073**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 14:29	1
Potassium	**28**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 01:29	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:46	07/30/19 01:29	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 01:29	1
Zinc	**0.24**	**J B ^**	0.50	0.020	mg/L		07/26/19 14:46	07/30/19 01:29	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		07/26/19 14:46	08/01/19 15:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:46	08/01/19 15:11	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		07/29/19 11:10	07/30/19 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.018	0.0061	mg/Kg	☼	07/31/19 15:40	08/01/19 09:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.29	mg/Kg	☼	08/01/19 13:45	08/01/19 16:40	1
pH	**8.5**		0.2	0.2	SU			07/25/19 13:36	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167185-1

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
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.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
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 - AE7-22A

Job ID: 500-167185-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-20

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

ANDREWS ENGINEERING

Client Contact	Laboratory
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 Name: AE7-22A 500-167185 COC

Project No.: PTB/WO: 184-006/22A

TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other

Sampler: Joshua Itcy

COC No.: 1 of 1

Lab Job No.: 500-167185

Sample Temp: 2.8

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.

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	1896V2-60-B01-1	7-23	1010	S	X	X					X	X	X	X	X					
2	1896V2-60-B01-2	↓	1015	↓	↓	↓					↓	↓	↓	↓	↓					
3	1896V2-60-B02-1		1030																	
4	1896V2-60-B02-2		1035																	
5	1896V2-60-B02-2 DUP		1040																	
6	1896V2-60-B03-1		1050																	
7	1896V2-60-B03-2	↓	1055	↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 7/23/19 4:24pm	Received by:	Date/Time 7/23/19 4:24pm
Relinquished by:	Date/Time 7-24-19 0905	Received by:	Date/Time 7/24/19 0905
Relinquished by:	Date/Time 7/24/19 1000	Received by:	Date/Time 7/24/19 1000

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 346 (US 41/North Skokie Highway) Office Phone Number, if available:

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

City: Lake Bluff State: IL Zip Code: 60044

County: Cook Township: Shields

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

Latitude: 42.27945 (Decimal Degrees) Longitude: -87.87019 (-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.): 456

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.

Project Name: FAP 346 (US 41/North Skokie Highway) Latitude: 42.27945 Longitude: - 87.87019

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 1896V2-61-B01 WAS SAMPLED ADJACENT TO SITES 1896V3-55 AND 1896V3-61. SEE TABLE 3g 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: 500-167192-1.

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:

Jul 1, 2024
Date:

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

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
1,1,2,2-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 1896V3-61
IDOT Pump Station #37

Sample ID	1896V2-61-B01-1	1896V2-61-B01-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7.5	7.5-15					
Sample Date	7/23/2019	7/23/2019	[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	8.6					
Matrix	Soil	Soil					
No Contaminants of Concern Noted.							

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 500-167192-1
Client Project/Site: IDOT - AE7-22A

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/6/2019 5:18:15 PM

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

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167192-1

Client Sample ID: 1896V2-61-B01-1
Date Collected: 07/23/19 09:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-1
Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/24/19 16:30	07/27/19 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*07/24/19 16:30*	*07/27/19 20:54*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*07/24/19 16:30*	*07/27/19 20:54*	*1*
Dibromofluoromethane	*110*		*75 - 126*	*07/24/19 16:30*	*07/27/19 20:54*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*07/24/19 16:30*	*07/27/19 20:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167192-1

Client Sample ID: 1896V2-61-B01-1
Date Collected: 07/23/19 09:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-1
Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167192-1

Client Sample ID: 1896V2-61-B01-1
Date Collected: 07/23/19 09:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-1
Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	07/26/19 07:55	07/27/19 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*64*		*31 - 143*	*07/26/19 07:55*	*07/27/19 12:06*	*1*
2-Fluorobiphenyl	*70*		*43 - 145*	*07/26/19 07:55*	*07/27/19 12:06*	*1*
2-Fluorophenol	*101*		*31 - 166*	*07/26/19 07:55*	*07/27/19 12:06*	*1*
Nitrobenzene-d5	*70*		*37 - 147*	*07/26/19 07:55*	*07/27/19 12:06*	*1*
Phenol-d5	*80*		*30 - 153*	*07/26/19 07:55*	*07/27/19 12:06*	*1*
Terphenyl-d14	*87*		*42 - 157*	*07/26/19 07:55*	*07/27/19 12:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.24**	**J**	1.1	0.22	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Arsenic	**7.0**		0.57	0.19	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Barium	**53**		0.57	0.065	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Beryllium	**0.49**		0.23	0.053	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Boron	**7.7**		2.8	0.26	mg/Kg	☼	07/25/19 08:17	07/26/19 16:38	1
Cadmium	**0.25**	**B**	0.11	0.020	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Calcium	**33000**	**B**	11	1.9	mg/Kg	☼	07/25/19 08:17	07/26/19 16:38	1
Chromium	**14**		0.57	0.28	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Cobalt	**10**		0.28	0.074	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Copper	**23**		0.57	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Iron	**18000**		11	5.9	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Lead	**13**		0.28	0.13	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Magnesium	**20000**		5.7	2.8	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Manganese	**500**		0.57	0.082	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Nickel	**22**		0.57	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Potassium	**1900**		28	10	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Silver	**2.4**		0.28	0.073	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Sodium	**130**		57	8.4	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Thallium	**0.54**	**J**	0.57	0.28	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Vanadium	**24**		0.28	0.067	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	1
Zinc	**82**		1.1	0.50	mg/Kg	☼	07/25/19 08:17	07/26/19 00:51	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		07/27/19 15:44	07/30/19 05:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		07/27/19 15:44	07/30/19 05:12	1
Manganese	**0.74**		0.025	0.010	mg/L		07/27/19 15:44	07/30/19 05:12	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167192-1

Client Sample ID: 1896V2-61-B01-1
Date Collected: 07/23/19 09:45
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-1
Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.011**	**J**	0.050	0.010	mg/L		07/26/19 14:46	07/30/19 02:01	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		07/26/19 14:46	07/30/19 02:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/26/19 14:46	07/30/19 02:01	1
Boron	**0.097**	**J**	0.10	0.050	mg/L		07/26/19 14:46	07/30/19 02:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:46	07/30/19 02:01	1
Calcium	**19**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 02:01	1
Chromium	**0.052**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:01	1
Cobalt	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:01	1
Iron	**39**		0.40	0.20	mg/L		07/26/19 14:46	07/30/19 02:01	1
Lead	**0.022**		0.0075	0.0075	mg/L		07/26/19 14:46	07/30/19 02:01	1
Manganese	**0.25**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:01	1
Nickel	**0.035**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 15:08	1
Potassium	**16**		2.5	0.50	mg/L		07/26/19 14:46	07/30/19 02:01	1
Selenium	<0.050		0.050	0.020	mg/L		07/26/19 14:46	07/30/19 02:01	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:01	1
Zinc	**0.34**	**J B ^**	0.50	0.020	mg/L		07/26/19 14:46	07/30/19 02:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		07/26/19 14:46	08/01/19 15:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		07/26/19 14:46	08/01/19 15:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		07/29/19 11:10	07/30/19 10:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.026**		0.018	0.0059	mg/Kg	☼	07/31/19 15:40	08/01/19 09:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.28	mg/Kg	☼	08/05/19 13:00	08/06/19 11:34	1
pH	**8.2**		0.2	0.2	SU			07/25/19 13:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167192-1

Client Sample ID: 1896V2-61-B01-2
Date Collected: 07/23/19 09:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-2
Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Acetone	**0.0078**	**J**	0.016	0.0071	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	07/24/19 16:30	07/27/19 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 134*	*07/24/19 16:30*	*07/27/19 21:19*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 131*	*07/24/19 16:30*	*07/27/19 21:19*	*1*
Dibromofluoromethane	*113*		*75 - 126*	*07/24/19 16:30*	*07/27/19 21:19*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/24/19 16:30*	*07/27/19 21:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-22A

Job ID: 500-167192-1

Client Sample ID: 1896V2-61-B01-2
Date Collected: 07/23/19 09:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-2
Matrix: Solid
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	<0.39		0.39	0.089	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1

Client Sample ID: 1896V2-61-B01-2
Date Collected: 07/23/19 09:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-2
Matrix: Solid
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	<0.039		0.039	0.010	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	07/26/19 07:55	07/27/19 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*07/26/19 07:55*	*07/27/19 12:35*	*1*
2-Fluorobiphenyl	*72*		*43 - 145*	*07/26/19 07:55*	*07/27/19 12:35*	*1*
2-Fluorophenol	*105*		*31 - 166*	*07/26/19 07:55*	*07/27/19 12:35*	*1*
Nitrobenzene-d5	*71*		*37 - 147*	*07/26/19 07:55*	*07/27/19 12:35*	*1*
Phenol-d5	*83*		*30 - 153*	*07/26/19 07:55*	*07/27/19 12:35*	*1*
Terphenyl-d14	*86*		*42 - 157*	*07/26/19 07:55*	*07/27/19 12:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.29**	**J**	1.2	0.22	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Arsenic	**7.8**		0.58	0.20	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Barium	**39**		0.58	0.066	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Beryllium	**0.58**		0.23	0.054	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Boron	**14**		2.9	0.27	mg/Kg	☼	07/25/19 08:17	07/26/19 16:46	1
Cadmium	**0.24**	**B**	0.12	0.021	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Calcium	**60000**	**B**	58	9.8	mg/Kg	☼	07/25/19 08:17	07/26/19 16:50	5
Chromium	**16**		0.58	0.29	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Cobalt	**14**		0.29	0.076	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Copper	**25**		0.58	0.16	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Iron	**18000**		12	6.0	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Lead	**14**		0.29	0.13	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Magnesium	**29000**		5.8	2.9	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Manganese	**460**		0.58	0.084	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Nickel	**33**		0.58	0.17	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Potassium	**3500**		29	10	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Selenium	**0.37**	**J**	0.58	0.34	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Silver	**2.9**		0.29	0.075	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Sodium	**410**		58	8.6	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Thallium	**0.96**		0.58	0.29	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Vanadium	**19**		0.29	0.068	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	1
Zinc	**57**		1.2	0.51	mg/Kg	☼	07/25/19 08:17	07/26/19 00:55	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		07/27/19 15:44	07/30/19 05:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		07/27/19 15:44	07/30/19 05:29	1
Chromium	<0.025		0.025	0.010	mg/L		07/27/19 15:44	07/30/19 05:29	1
Iron	**0.21**	**J**	0.40	0.20	mg/L		07/27/19 15:44	07/30/19 05:29	1

Client Sample ID: 1896V2-61-B01-2
Date Collected: 07/23/19 09:50
Date Received: 07/24/19 10:00

Lab Sample ID: 500-167192-2
Matrix: Solid
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		07/27/19 15:44	07/30/19 05:29	1
Manganese	**1.0**		0.025	0.010	mg/L		07/27/19 15:44	07/30/19 05:29	1
Nickel	<0.025		0.025	0.010	mg/L		07/27/19 15:44	07/30/19 05:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.058**		0.050	0.010	mg/L		07/26/19 14:46	07/30/19 02:14	1
Barium	**0.34**	**J**	0.50	0.050	mg/L		07/26/19 14:46	07/30/19 02:14	1
Beryllium	**0.0054**		0.0040	0.0040	mg/L		07/26/19 14:46	07/30/19 02:14	1
Boron	**0.20**		0.10	0.050	mg/L		07/26/19 14:46	07/30/19 02:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		07/26/19 14:46	07/30/19 02:14	1
Calcium	**29**	**F1**	2.5	0.50	mg/L		07/26/19 14:46	07/30/19 02:14	1
Chromium	**0.13**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:14	1
Cobalt	**0.052**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:14	1
Iron	**130**		0.40	0.20	mg/L		07/26/19 14:46	07/30/19 02:14	1
Lead	**0.061**		0.0075	0.0075	mg/L		07/26/19 14:46	07/30/19 02:14	1
Manganese	**0.56**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:14	1
Nickel	**0.18**		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 15:12	1
Potassium	**38**	**F1**	2.5	0.50	mg/L		07/26/19 14:46	07/30/19 02:14	1
Selenium	<0.050	F1	0.050	0.020	mg/L		07/26/19 14:46	07/30/19 02:14	1
Silver	<0.025		0.025	0.010	mg/L		07/26/19 14:46	07/30/19 02:14	1
Zinc	**0.36**	**J B ^**	0.50	0.020	mg/L		07/26/19 14:46	07/30/19 02:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		07/27/19 15:44	08/02/19 19:56	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		07/26/19 14:46	08/01/19 15:24	1
Thallium	**0.0064**		0.0020	0.0020	mg/L		07/26/19 14:46	08/01/19 15:24	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		07/29/19 11:10	07/30/19 10:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.017	0.0057	mg/Kg	☼	07/31/19 15:40	08/01/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.28	mg/Kg	☼	08/05/19 13:00	08/06/19 11:35	1
pH	**8.6**		0.2	0.2	SU			07/25/19 13:50	1

Definitions/Glossary

Client: Andrews Engineering Inc. Job ID: 500-167192-1
Project/Site: IDOT - AE7-22A

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
^	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.
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.
¤	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 - AE7-22A

Job ID: 500-167192-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-20

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

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

500-167192 COC

Client Contact	Laboratory	
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 Name: AE7-22A Project No.: PTB/WO: 184-006/22A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: Joshua Hey

COC No.: 1 of 1

Lab Job No.: 500-167192

Sample Temp: 4.0

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.

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: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	1896V2-61-B01-1	7-23	0945	S	X	X					X	X	X	X	X					
2	1896V2-61-B01-2	7-23	0950	↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 7/23/19 4:32pm	Received by: Date/Time 7/23/19 4:32pm
Relinquished by:	Date/Time 7-24-19 0705	Received by: Date/Time 7/24/19 0905
Relinquished by:	Date/Time 7/24/19 1000	Received by: Date/Time 7/24/19 1000