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: FAI 55 (I-55) Office Phone Number, if available:

Physical Site Location (address, including number and street):
I-55 at IL 59 interchange (Station 255+00 to Station 283+00 LT and RT)

City: Shorewood & Joliet State: IL Zip Code: 60404 &60431

County: Will Township: Troy

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

Latitude: 41.50323 (Decimal Degrees) Longitude: -88.19815 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

IEPA Site Number(s), if assigned: BOL: 1970455112 BOW: BOA:

Approximate Start Date (mm/dd/yyyy): N/A Approximate End Date (mm/dd/yyyy): N/A

Estimated Volume of debris (cu. Yd.): 8,648

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: FAI 55 (I-55) Latitude: 41.50323 Longitude: - 88.19815

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 3481-1-B01, -B04, B06, -B07, -B08, -B09, -B10, -B11, -B13, -B15, -B16, -B18, -B19, -B20, -B22 THROUGH -B26, -B28, -B29 & -B31 THROUGH -B37 WERE SAMPLED ADJACENT TO SITE 3481-1. SEE TABLE 3 AND FIGURE 2 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-185456-1, 500-185507-1, 500-185586-1 AND 500-185430-1.

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:

Oct 1, 2020
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 3481-1
ROW

Sample ID	3481-1-B01		3481-1-B04		3481-1-B06-1		3481-1-B06-2		3481-1-B06-3		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-2		0-8		0-7		7-14		14-19						
Sample Date	7/24/2020		7/24/2020		7/28/2020		7/28/2020		7/28/2020						
PID	0		0		0		0		0						
Sample pH	8.4		7.8		8.7		8.2		7.8		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	**0.41**	**1,2**	**J 0.018**		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**5.6**		**8.8**		**8.6**		**3.2**		**9.6**		11.3	--	11.3	--	13

Sample ID	3481-1-B07-1		3481-1-B07-2		3481-1-B07-2 DUP		3481-1-B07-3		3481-1-B08		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7		7-14		7-14		14-21		0-8						
Sample Date	7/28/2020		7/28/2020		7/28/2020		7/28/2020		7/24/2020						
PID	0		0		0		0		0						
Sample pH	8.1		8.5		8.4		8		7.9		[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		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		**J 0.022**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**8**		**4.9**		**10**		**5**		**5.7**		11.3	--	11.3	--	13

Sample ID	3481-1-B09-1		3481-1-B09-2		3481-1-B09-3		3481-1-B10-1		3481-1-B10-2		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7		7-14		14-20		0-7		7-14						
Sample Date	7/28/2020		7/28/2020		7/28/2020		7/28/2020		7/28/2020						
PID	0		0		0		0		0						
Sample pH	8		8.3		7.7		8.4		8		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		**J 0.0098**		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**8.6**		**7.7**		**7.6**		**8.4**		**7.1**		11.3	--	11.3	--	13

Sample ID	3481-1-B10-3		3481-1-B11		3481-1-B13		3481-1-B15		3481-1-B16		**Maximum Allowable Concentration**				
Sample Depth (ft)	14-21		0-8		0-8		0-8		0-8						
Sample Date	7/28/2020		7/24/2020		7/24/2020		7/24/2020		7/24/2020						
PID	0		0		0		0		0						
Sample pH	7.9		8.9		8.3		8.9		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		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		**J 0.022**		ND		**J 0.026**		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**8.8**		**2.5**		**7**		**5**		**9.1**		11.3	--	11.3	--	13

Sample ID	3481-1-B18		3481-1-B19		3481-1-B20		3481-1-B22		3481-1-B23-1		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8		0-8		0-8		0-8		0-7						
Sample Date	7/23/2020		7/23/2020		7/23/2020		7/23/2020		7/27/2020						
PID	0		0		0		0		0						
Sample pH	8.8		9		8.1		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		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		**J 0.014**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**12**	**1,3**	**5.9**		**8.4**		**8.8**		**8.6**		11.3	--	11.3	--	13

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ROW

Sample ID	3481-1-B23-2		3481-1-B23-3		3481-1-B24-1		3481-1-B24-2		3481-1-B24-3		**Maximum Allowable Concentration**				
Sample Depth (ft)	7-14		14-21		0-7		7-14		14-21						
Sample Date	7/27/2020		7/27/2020		7/27/2020		7/27/2020		7/27/2020						
PID	0		0		0		0		0						
Sample pH	8.5		7.9		7.4		8.4		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						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**11**		**5.3**		**9.8**		**7**		**6.4**		11.3	--	11.3	--	13

Sample ID	3481-1-B25		3481-1-B26-1		3481-1-B26-2		3481-1-B26-3		3481-1-B26-3 DUP		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8		0-7		7-14		14-21		14-21						
Sample Date	7/23/2020		7/27/2020		7/27/2020		7/27/2020		7/27/2020						
PID	0		0		0		0		0						
Sample pH	8.5		7.7		8		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						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**8.8**		**8.5**		**7.5**		**8.6**		**8.6**		11.3	--	11.3	--	13

Sample ID	3481-1-B28		3481-1-B29		3481-1-B31		3481-1-B32		3481-1-B33		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8		0-8		0-2		0-2		0-2						
Sample Date	7/23/2020		7/23/2020		7/27/2020		7/27/2020		7/27/2020						
PID	0		0		0		0		0						
Sample pH	8.8		8.4		7.8		7.1		7.6		[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						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		**J 0.018**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**5.9**		**8.7**		**10**		**6.6**		**8.2**		11.3	--	11.3	--	13

Sample ID	3481-1-B34		3481-1-B35		3481-1-B36		3481-1-B36 DUP		3481-1-B37		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-2		0-2		0-2		0-2		0-2						
Sample Date	7/28/2020		7/28/2020		7/28/2020		7/28/2020		7/28/2020						
PID	0		0		0		0		0						
Sample pH	8.2		7.7		8.3		7.9		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		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**4.3**		**6.8**		**3.4**		**3.1**		**7.7**		11.3	--	11.3	--	13

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-185456-1
Client Project/Site: IDOT - AE7-038

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/10/2020 2:58:07 PM

Richard Wright, Senior Project Manager
(708)746-0045
Richard.Wright@Eurofinset.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B01
Date Collected: 07/24/20 09:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-1
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
1,1-Dichloroethene	<0.0020	*	0.0020	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Acetone	<0.020		0.020	0.0085	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Toluene	<0.0020		0.0020	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Vinyl chloride	<0.0020		0.0020	0.00086	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	07/24/20 17:55	07/31/20 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/24/20 17:55*	*07/31/20 11:37*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/24/20 17:55*	*07/31/20 11:37*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*07/24/20 17:55*	*07/31/20 11:37*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*07/24/20 17:55*	*07/31/20 11:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20	F1 F2	0.20	0.043	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
1,2-Dichlorobenzene	<0.20	F1 F2	0.20	0.047	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
1,3-Dichlorobenzene	<0.20	F1 F2	0.20	0.045	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
1,4-Dichlorobenzene	<0.20	F1 F2	0.20	0.051	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2,2'-oxybis[1-chloropropane]	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1

Client Sample ID: 3481-1-B01
Date Collected: 07/24/20 09:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-1
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39	F1 F2	0.39	0.090	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2,4,6-Trichlorophenol	<0.39	F1 F2	0.39	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2,4-Dichlorophenol	<0.39	F1 F2	0.39	0.094	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2,4-Dimethylphenol	<0.39	F1 F2	0.39	0.15	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2,4-Dinitrophenol	<0.80	F1	0.80	0.70	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2,4-Dinitrotoluene	<0.20	F1 F2	0.20	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2,6-Dinitrotoluene	<0.20	F1 F2	0.20	0.078	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2-Chloronaphthalene	<0.20	F1 F2	0.20	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2-Chlorophenol	<0.20	F1 F2	0.20	0.067	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2-Methylnaphthalene	**0.015**	**J F1 F2**	0.080	0.0073	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2-Methylphenol	<0.20	F1 F2	0.20	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2-Nitroaniline	<0.20	F1 F2	0.20	0.053	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
2-Nitrophenol	<0.39	F1 F2	0.39	0.093	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
3 & 4 Methylphenol	<0.20	F1 F2	0.20	0.066	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
3,3'-Dichlorobenzidine	<0.20	F1 F2	0.20	0.055	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
3-Nitroaniline	<0.39	F1 F2	0.39	0.12	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
4,6-Dinitro-2-methylphenol	<0.80	F1	0.80	0.32	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
4-Bromophenyl phenyl ether	<0.20	F1 F2	0.20	0.052	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
4-Chloro-3-methylphenol	<0.39	F1 F2	0.39	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
4-Chloroaniline	<0.80	F1	0.80	0.19	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
4-Chlorophenyl phenyl ether	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
4-Nitroaniline	<0.39	F1 F2	0.39	0.17	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
4-Nitrophenol	<0.80	F2	0.80	0.38	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Acenaphthene	**0.022**	**J F1 F2**	0.039	0.0071	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Acenaphthylene	**0.025**	**J F1 F2**	0.039	0.0052	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Anthracene	**0.049**	**F1 F2**	0.039	0.0066	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Benzo[a]anthracene	**0.27**	**F1 F2**	0.039	0.0053	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Benzo[a]pyrene	**0.41**	**F1 F2**	0.039	0.0077	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Benzo[b]fluoranthene	**0.66**	**F1 F2**	0.039	0.0085	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Benzo[g,h,i]perylene	**0.24**	**F1 F2**	0.039	0.013	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Benzo[k]fluoranthene	**0.37**	**F1 F2**	0.039	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Bis(2-chloroethoxy)methane	<0.20	F1 F2	0.20	0.040	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Bis(2-chloroethyl)ether	<0.20	F1 F2	0.20	0.059	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Bis(2-ethylhexyl) phthalate	**0.34**	**F1 F2**	0.20	0.072	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Butyl benzyl phthalate	**0.091**	**J F1 F2**	0.20	0.075	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Carbazole	<0.20	F1 F2	0.20	0.099	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Chrysene	**0.40**	**F1 F2**	0.039	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Dibenz(a,h)anthracene	**0.037**	**J F1 F2**	0.039	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Dibenzofuran	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Diethyl phthalate	<0.20	F1 F2	0.20	0.067	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Dimethyl phthalate	<0.20	F1 F2	0.20	0.052	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Di-n-butyl phthalate	<0.20	F1 F2	0.20	0.060	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Di-n-octyl phthalate	<0.20	F1 F2	0.20	0.064	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Fluoranthene	**0.59**	**F1 F2**	0.039	0.0073	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Fluorene	**0.017**	**J F1 F2**	0.039	0.0056	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Hexachlorobenzene	<0.080	F1 F2	0.080	0.0092	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Hexachlorobutadiene	<0.20	F1 F2	0.20	0.062	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Hexachlorocyclopentadiene	<0.80	F1	0.80	0.23	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Hexachloroethane	<0.20	F1 F2	0.20	0.060	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1

Client Sample ID: 3481-1-B01

Date Collected: 07/24/20 09:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-1

Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.19**	**F1 F2**	0.039	0.010	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Isophorone	<0.20	F1 F2	0.20	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Naphthalene	**0.0088**	**J F1 F2**	0.039	0.0061	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Nitrobenzene	<0.039	F1 F2	0.039	0.0099	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
N-Nitrosodi-n-propylamine	<0.080	F1 F2	0.080	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
N-Nitrosodiphenylamine	<0.20	F1 F2	0.20	0.047	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Pentachlorophenol	<0.80	F2	0.80	0.63	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Phenanthrene	**0.25**	**F1 F2**	0.039	0.0055	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Phenol	<0.20	F1 F2	0.20	0.088	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1
Pyrene	**0.61**	**F1 F2**	0.039	0.0079	mg/Kg	☼	08/06/20 07:19	08/07/20 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*124*		*31 - 143*	*08/06/20 07:19*	*08/07/20 19:02*	*1*
2-Fluorobiphenyl	*92*		*43 - 145*	*08/06/20 07:19*	*08/07/20 19:02*	*1*
2-Fluorophenol	*85*		*31 - 166*	*08/06/20 07:19*	*08/07/20 19:02*	*1*
Nitrobenzene-d5	*77*		*37 - 147*	*08/06/20 07:19*	*08/07/20 19:02*	*1*
Phenol-d5	*76*		*30 - 153*	*08/06/20 07:19*	*08/07/20 19:02*	*1*
Terphenyl-d14	*117*		*42 - 157*	*08/06/20 07:19*	*08/07/20 19:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**	**F1 B**	1.1	0.22	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Arsenic	**5.6**		0.56	0.19	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Barium	**130**	**F1 F2**	0.56	0.063	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Beryllium	**0.57**		0.22	0.052	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Boron	**9.7**	**F1**	2.8	0.26	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Cadmium	**0.38**	**B**	0.11	0.020	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Calcium	**81000**	**B F2**	110	19	mg/Kg	☼	08/03/20 07:37	08/04/20 00:49	10
Chromium	**13**	**F1**	0.56	0.28	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Cobalt	**8.3**		0.28	0.073	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Copper	**17**		0.56	0.16	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Iron	**16000**		110	58	mg/Kg	☼	08/03/20 07:37	08/04/20 00:49	10
Lead	**86**	**F2**	0.28	0.13	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Magnesium	**46000**	**F2**	56	28	mg/Kg	☼	08/03/20 07:37	08/04/20 00:49	10
Manganese	**610**	**F2**	0.56	0.081	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Nickel	**15**		0.56	0.16	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Potassium	**1300**	**F1**	28	9.9	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Selenium	**0.46**	**J F1**	0.56	0.33	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Silver	<0.28	F1	0.28	0.072	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Sodium	**1600**	**B**	56	8.2	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Vanadium	**21**	**F1**	0.28	0.066	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	1
Zinc	**81**	**F1**	1.1	0.49	mg/Kg	☼	08/03/20 07:37	08/03/20 22:47	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		08/06/20 05:58	08/06/20 22:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/06/20 05:58	08/06/20 22:32	1
Manganese	**9.7**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:32	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B01

Date Collected: 07/24/20 09:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-1

Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.030**	**J**	0.050	0.010	mg/L		08/06/20 06:00	08/06/20 22:42	1
Barium	**0.37**	**J**	0.50	0.050	mg/L		08/06/20 06:00	08/06/20 22:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/06/20 06:00	08/06/20 22:42	1
Boron	**0.092**	**J**	0.10	0.050	mg/L		08/06/20 06:00	08/06/20 22:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/06/20 06:00	08/06/20 22:42	1
Calcium	**18**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 22:42	1
Chromium	**0.066**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:42	1
Cobalt	**0.015**	**J**	0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:42	1
Iron	**57**		0.40	0.20	mg/L		08/06/20 06:00	08/06/20 22:42	1
Lead	**0.19**		0.0075	0.0075	mg/L		08/06/20 06:00	08/06/20 22:42	1
Manganese	**0.50**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:42	1
Nickel	**0.042**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:42	1
Potassium	**8.7**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 22:42	1
Selenium	<0.050		0.050	0.020	mg/L		08/06/20 06:00	08/06/20 22:42	1
Silver	<0.025		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:42	1
Zinc	**0.33**	**J**	0.50	0.020	mg/L		08/06/20 06:00	08/06/20 22:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/06/20 06:00	08/06/20 15:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/06/20 06:00	08/06/20 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/06/20 09:15	08/07/20 09:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**		0.019	0.0064	mg/Kg	☼	08/04/20 13:35	08/05/20 07:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	08/05/20 10:40	08/05/20 14:33	1
pH	**8.4**		0.2	0.2	SU			07/30/20 18:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B04
Date Collected: 07/24/20 10:35
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-4
Matrix: Solid
Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
1,1-Dichloroethene	<0.0018	*	0.0018	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
2-Butanone (MEK)	**0.0034**	**J**	0.0044	0.0020	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Acetone	**0.024**		0.018	0.0077	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*07/24/20 17:55*	*07/31/20 12:52*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/24/20 17:55*	*07/31/20 12:52*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*07/24/20 17:55*	*07/31/20 12:52*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*07/24/20 17:55*	*07/31/20 12:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1

Client Sample ID: 3481-1-B04
Date Collected: 07/24/20 10:35
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-4
Matrix: Solid
Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2-Methylnaphthalene	**0.0084**	**J**	0.085	0.0078	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Benzo[a]anthracene	**0.014**	**J**	0.042	0.0057	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Benzo[a]pyrene	**0.018**	**J**	0.042	0.0082	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Benzo[b]fluoranthene	**0.025**	**J**	0.042	0.0091	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Chrysene	**0.019**	**J**	0.042	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Fluoranthene	**0.026**	**J**	0.042	0.0078	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1

Client Sample ID: 3481-1-B04
Date Collected: 07/24/20 10:35
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-4
Matrix: Solid
Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.012**	**J**	0.042	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Phenanthrene	**0.039**	**J**	0.042	0.0059	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1
Pyrene	**0.022**	**J**	0.042	0.0084	mg/Kg	☼	08/06/20 07:19	08/07/20 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*31 - 143*	*08/06/20 07:19*	*08/07/20 01:14*	*1*
2-Fluorobiphenyl	*78*		*43 - 145*	*08/06/20 07:19*	*08/07/20 01:14*	*1*
2-Fluorophenol	*81*		*31 - 166*	*08/06/20 07:19*	*08/07/20 01:14*	*1*
Nitrobenzene-d5	*70*		*37 - 147*	*08/06/20 07:19*	*08/07/20 01:14*	*1*
Phenol-d5	*70*		*30 - 153*	*08/06/20 07:19*	*08/07/20 01:14*	*1*
Terphenyl-d14	*102*		*42 - 157*	*08/06/20 07:19*	*08/07/20 01:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**	**B**	1.2	0.24	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Arsenic	**8.8**		0.61	0.21	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Barium	**78**		0.61	0.069	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Beryllium	**0.85**		0.24	0.057	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Boron	**11**		3.0	0.28	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Cadmium	**0.26**	**B**	0.12	0.022	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Calcium	**32000**	**B**	12	2.1	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Chromium	**18**		0.61	0.30	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Cobalt	**12**		0.30	0.080	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Copper	**21**		0.61	0.17	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Iron	**22000**		12	6.3	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Lead	**58**		0.30	0.14	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Magnesium	**22000**		6.1	3.0	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Manganese	**500**		0.61	0.088	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Nickel	**29**		0.61	0.18	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Potassium	**2400**		30	11	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Selenium	**0.46**	**J**	0.61	0.36	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Silver	<0.30		0.30	0.078	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Sodium	**1200**	**B**	61	9.0	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Vanadium	**28**		0.30	0.072	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	1
Zinc	**75**		1.2	0.53	mg/Kg	☼	08/03/20 07:37	08/03/20 23:27	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		08/06/20 05:58	08/06/20 22:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/06/20 05:58	08/06/20 22:41	1
Chromium	<0.025		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:41	1
Iron	<0.40		0.40	0.20	mg/L		08/06/20 05:58	08/06/20 22:41	1

Client Sample ID: 3481-1-B04
Date Collected: 07/24/20 10:35
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-4
Matrix: Solid
Percent Solids: 78.6

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		08/06/20 05:58	08/06/20 22:41	1
Manganese	**7.4**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:41	1
Nickel	**0.012**	**J**	0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.072**		0.050	0.010	mg/L		08/06/20 06:00	08/06/20 22:54	1
Barium	**0.63**		0.50	0.050	mg/L		08/06/20 06:00	08/06/20 22:54	1
Beryllium	**0.0064**		0.0040	0.0040	mg/L		08/06/20 06:00	08/06/20 22:54	1
Boron	**0.19**		0.10	0.050	mg/L		08/06/20 06:00	08/06/20 22:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/06/20 06:00	08/06/20 22:54	1
Calcium	**17**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 22:54	1
Chromium	**0.14**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:54	1
Cobalt	**0.046**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:54	1
Iron	**150**		0.40	0.20	mg/L		08/06/20 06:00	08/06/20 22:54	1
Lead	**0.22**		0.0075	0.0075	mg/L		08/06/20 06:00	08/06/20 22:54	1
Manganese	**1.0**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:54	1
Nickel	**0.15**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:54	1
Potassium	**28**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 22:54	1
Selenium	<0.050		0.050	0.020	mg/L		08/06/20 06:00	08/06/20 22:54	1
Silver	<0.025		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 22:54	1
Zinc	**0.40**	**J**	0.50	0.020	mg/L		08/06/20 06:00	08/06/20 22:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/06/20 05:58	08/07/20 12:17	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		08/06/20 06:00	08/06/20 15:17	1
Thallium	**0.0033**		0.0020	0.0020	mg/L		08/06/20 06:00	08/06/20 15:17	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		08/06/20 09:15	08/07/20 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.048**		0.020	0.0065	mg/Kg	☼	08/04/20 13:35	08/05/20 07:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.61		0.61	0.30	mg/Kg	☼	08/05/20 10:40	08/05/20 14:35	1
pH	**7.8**		0.2	0.2	SU			07/30/20 18:17	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B08
Date Collected: 07/24/20 11:10
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-6
Matrix: Solid
Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
1,1-Dichloroethene	<0.0018	*	0.0018	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Methylene Chloride	<0.0044		0.0044	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 134*	*07/24/20 17:55*	*07/31/20 17:30*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*07/24/20 17:55*	*07/31/20 17:30*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*07/24/20 17:55*	*07/31/20 17:30*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*07/24/20 17:55*	*07/31/20 17:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1

Client Sample ID: 3481-1-B08
Date Collected: 07/24/20 11:10
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-6
Matrix: Solid
Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Benzo[a]anthracene	**0.018**	**J**	0.041	0.0055	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Benzo[a]pyrene	**0.022**	**J**	0.041	0.0080	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Benzo[b]fluoranthene	**0.036**	**J**	0.041	0.0089	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.041	0.013	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Benzo[k]fluoranthene	**0.015**	**J**	0.041	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Chrysene	**0.020**	**J**	0.041	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Fluoranthene	**0.030**	**J**	0.041	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B08
Date Collected: 07/24/20 11:10
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-6
Matrix: Solid
Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.013**	**J**	0.041	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Phenanthrene	**0.010**	**J**	0.041	0.0057	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Phenol	<0.21		0.21	0.092	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1
Pyrene	**0.022**	**J**	0.041	0.0082	mg/Kg	☼	08/06/20 07:19	08/07/20 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*72*		*31 - 143*	*08/06/20 07:19*	*08/07/20 02:09*	*1*
2-Fluorobiphenyl	*44*		*43 - 145*	*08/06/20 07:19*	*08/07/20 02:09*	*1*
2-Fluorophenol	*54*		*31 - 166*	*08/06/20 07:19*	*08/07/20 02:09*	*1*
Nitrobenzene-d5	*37*		*37 - 147*	*08/06/20 07:19*	*08/07/20 02:09*	*1*
Phenol-d5	*55*		*30 - 153*	*08/06/20 07:19*	*08/07/20 02:09*	*1*
Terphenyl-d14	*103*		*42 - 157*	*08/06/20 07:19*	*08/07/20 02:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.86**	**J B**	1.2	0.23	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Arsenic	**5.7**		0.60	0.20	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Barium	**99**		0.60	0.068	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Beryllium	**0.73**		0.24	0.056	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Boron	**2.6**	**J**	3.0	0.28	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Cadmium	**0.076**	**J B**	0.12	0.021	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Calcium	**3400**	**B**	12	2.0	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Chromium	**17**		0.60	0.30	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Cobalt	**6.9**		0.30	0.078	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Copper	**14**		0.60	0.17	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Iron	**18000**		12	6.2	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Lead	**12**		0.30	0.14	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Magnesium	**3400**		6.0	3.0	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Manganese	**200**		0.60	0.087	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Nickel	**22**		0.60	0.17	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Potassium	**1100**		30	11	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Silver	<0.30		0.30	0.077	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Sodium	**1400**	**B**	60	8.8	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Vanadium	**26**		0.30	0.070	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	1
Zinc	**72**		1.2	0.52	mg/Kg	☼	08/03/20 07:37	08/03/20 23:34	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		08/06/20 05:58	08/06/20 22:54	1
Chromium	<0.025		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:54	1
Iron	<0.40		0.40	0.20	mg/L		08/06/20 05:58	08/06/20 22:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/06/20 05:58	08/06/20 22:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B08
Date Collected: 07/24/20 11:10
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-6
Matrix: Solid
Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.17**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:54	1
Nickel	<0.025		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.040**	**J**	0.050	0.010	mg/L		08/06/20 06:00	08/06/20 23:02	1
Barium	**1.4**		0.50	0.050	mg/L		08/06/20 06:00	08/06/20 23:02	1
Beryllium	**0.0087**		0.0040	0.0040	mg/L		08/06/20 06:00	08/06/20 23:02	1
Boron	**0.14**		0.10	0.050	mg/L		08/06/20 06:00	08/06/20 23:02	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/06/20 06:00	08/06/20 23:02	1
Calcium	**33**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:02	1
Chromium	**0.24**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:02	1
Cobalt	**0.035**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:02	1
Iron	**230**		0.40	0.20	mg/L		08/06/20 06:00	08/06/20 23:02	1
Lead	**0.054**		0.0075	0.0075	mg/L		08/06/20 06:00	08/06/20 23:02	1
Manganese	**0.61**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:02	1
Nickel	**0.17**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:02	1
Potassium	**21**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:02	1
Selenium	<0.050		0.050	0.020	mg/L		08/06/20 06:00	08/06/20 23:02	1
Silver	<0.025		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:02	1
Zinc	**0.75**		0.50	0.020	mg/L		08/06/20 06:00	08/06/20 23:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/06/20 05:58	08/07/20 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/06/20 06:00	08/06/20 15:21	1
Thallium	**0.0030**		0.0020	0.0020	mg/L		08/06/20 06:00	08/06/20 15:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0010		0.0010	0.0010	mg/L		08/06/20 09:15	08/07/20 09:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.057**		0.020	0.0067	mg/Kg	☼	08/04/20 13:35	08/05/20 07:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.30	mg/Kg	☼	08/05/20 10:40	08/05/20 14:35	1
pH	**7.9**		0.2	0.2	SU			07/30/20 18:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B11
Date Collected: 07/24/20 11:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-7
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	☼	07/24/20 17:55	07/31/20 17:55	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
1,1-Dichloroethene	<0.0016	*	0.0016	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
2-Butanone (MEK)	**0.0053**		0.0040	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Acetone	**0.027**		0.016	0.0070	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/24/20 17:55*	*07/31/20 17:55*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*07/24/20 17:55*	*07/31/20 17:55*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*07/24/20 17:55*	*07/31/20 17:55*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/24/20 17:55*	*07/31/20 17:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1

Client Sample ID: 3481-1-B11
Date Collected: 07/24/20 11:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-7
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	<0.37		0.37	0.086	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Benzo[a]anthracene	**0.021**	**J**	0.037	0.0051	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Benzo[a]pyrene	**0.022**	**J**	0.037	0.0073	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Benzo[b]fluoranthene	**0.025**	**J**	0.037	0.0081	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Benzo[g,h,i]perylene	**0.028**	**J**	0.037	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Chrysene	**0.028**	**J**	0.037	0.010	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Fluoranthene	**0.043**		0.037	0.0070	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1

Client Sample ID: 3481-1-B11
Date Collected: 07/24/20 11:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-7
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	<0.037		0.037	0.0097	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Phenanthrene	**0.016**	**J**	0.037	0.0052	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1
Pyrene	**0.031**	**J**	0.037	0.0075	mg/Kg	☼	08/06/20 07:19	08/07/20 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*08/06/20 07:19*	*08/07/20 12:41*	*1*
2-Fluorobiphenyl	*76*		*43 - 145*	*08/06/20 07:19*	*08/07/20 12:41*	*1*
2-Fluorophenol	*100*		*31 - 166*	*08/06/20 07:19*	*08/07/20 12:41*	*1*
Nitrobenzene-d5	*74*		*37 - 147*	*08/06/20 07:19*	*08/07/20 12:41*	*1*
Phenol-d5	*85*		*30 - 153*	*08/06/20 07:19*	*08/07/20 12:41*	*1*
Terphenyl-d14	*152*		*42 - 157*	*08/06/20 07:19*	*08/07/20 12:41*	*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	☼	08/03/20 07:37	08/03/20 23:38	1
Arsenic	**2.5**		0.55	0.19	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Barium	**10**		0.55	0.063	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Beryllium	**0.24**		0.22	0.052	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Boron	**9.8**		2.8	0.26	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Cadmium	**0.078**	**J B**	0.11	0.020	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Calcium	**120000**	**B**	110	19	mg/Kg	☼	08/03/20 07:37	08/04/20 01:09	10
Chromium	**5.5**		0.55	0.27	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Cobalt	**3.1**		0.28	0.072	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Copper	**5.5**		0.55	0.15	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Iron	**7700**		110	57	mg/Kg	☼	08/03/20 07:37	08/04/20 01:09	10
Lead	**6.4**		0.28	0.13	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Magnesium	**66000**		55	27	mg/Kg	☼	08/03/20 07:37	08/04/20 01:09	10
Manganese	**180**		0.55	0.080	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Nickel	**6.9**		0.55	0.16	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Potassium	**770**		28	9.8	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Silver	<0.28		0.28	0.071	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Sodium	**340**	**B**	55	8.2	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Vanadium	**10**		0.28	0.065	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	1
Zinc	**13**		1.1	0.48	mg/Kg	☼	08/03/20 07:37	08/03/20 23:38	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		08/06/20 05:58	08/06/20 22:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/06/20 05:58	08/06/20 22:57	1
Manganese	**8.4**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 22:57	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B11

Date Collected: 07/24/20 11:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-7

Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.032**	**J**	0.050	0.010	mg/L		08/06/20 06:00	08/06/20 23:06	1
Barium	**0.20**	**J**	0.50	0.050	mg/L		08/06/20 06:00	08/06/20 23:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/06/20 06:00	08/06/20 23:06	1
Boron	**0.11**		0.10	0.050	mg/L		08/06/20 06:00	08/06/20 23:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/06/20 06:00	08/06/20 23:06	1
Calcium	**15**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:06	1
Chromium	**0.049**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:06	1
Cobalt	**0.019**	**J**	0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:06	1
Iron	**54**		0.40	0.20	mg/L		08/06/20 06:00	08/06/20 23:06	1
Lead	**0.047**		0.0075	0.0075	mg/L		08/06/20 06:00	08/06/20 23:06	1
Manganese	**0.70**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:06	1
Nickel	**0.055**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:06	1
Potassium	**12**	**F1**	2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:06	1
Selenium	<0.050		0.050	0.020	mg/L		08/06/20 06:00	08/06/20 23:06	1
Silver	<0.025		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:06	1
Zinc	**0.14**	**J**	0.50	0.020	mg/L		08/06/20 06:00	08/06/20 23:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/06/20 06:00	08/06/20 15:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/06/20 06:00	08/06/20 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		08/06/20 09:15	08/07/20 09:24	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	☼	08/04/20 13:35	08/05/20 07:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.28	mg/Kg	☼	08/05/20 10:40	08/05/20 14:36	1
pH	**8.9**		0.2	0.2	SU			07/30/20 18:24	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B13
Date Collected: 07/24/20 12:20
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-10
Matrix: Solid
Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
1,1-Dichloroethene	<0.0017	*	0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Acetone	**0.0085**	**J**	0.017	0.0075	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*07/24/20 17:55*	*07/31/20 19:11*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/24/20 17:55*	*07/31/20 19:11*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*07/24/20 17:55*	*07/31/20 19:11*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/24/20 17:55*	*07/31/20 19:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1

Client Sample ID: 3481-1-B13
Date Collected: 07/24/20 12:20
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-10
Matrix: Solid
Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Benzo[b]fluoranthene	**0.013**	**J**	0.039	0.0085	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Chrysene	**0.015**	**J**	0.039	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1

Client Sample ID: 3481-1-B13
Date Collected: 07/24/20 12:20
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-10
Matrix: Solid
Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	08/06/20 07:19	08/07/20 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*114*		*31 - 143*	*08/06/20 07:19*	*08/07/20 03:31*	*1*
2-Fluorobiphenyl	*99*		*43 - 145*	*08/06/20 07:19*	*08/07/20 03:31*	*1*
2-Fluorophenol	*95*		*31 - 166*	*08/06/20 07:19*	*08/07/20 03:31*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*08/06/20 07:19*	*08/07/20 03:31*	*1*
Phenol-d5	*86*		*30 - 153*	*08/06/20 07:19*	*08/07/20 03:31*	*1*
Terphenyl-d14	*135*		*42 - 157*	*08/06/20 07:19*	*08/07/20 03:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.3**	**B**	1.1	0.21	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Arsenic	**7.0**		0.55	0.19	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Barium	**66**		0.55	0.063	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Beryllium	**0.82**		0.22	0.052	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Boron	**14**		2.8	0.26	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Cadmium	**0.059**	**J B**	0.11	0.020	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Calcium	**69000**	**B**	110	19	mg/Kg	☼	08/03/20 07:37	08/04/20 01:13	10
Chromium	**19**		0.55	0.27	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Cobalt	**12**		0.28	0.072	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Copper	**20**		0.55	0.15	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Iron	**19000**		11	5.7	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Lead	**13**		0.28	0.13	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Magnesium	**22000**		5.5	2.7	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Manganese	**370**		0.55	0.080	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Nickel	**34**		0.55	0.16	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Potassium	**3200**		28	9.8	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Silver	<0.28		0.28	0.071	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Sodium	**320**	**B**	55	8.2	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Thallium	**0.30**	**J**	0.55	0.28	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Vanadium	**25**		0.28	0.065	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1
Zinc	**57**		1.1	0.48	mg/Kg	☼	08/03/20 07:37	08/04/20 00:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050	*	0.050	0.010	mg/L		08/06/20 05:58	08/06/20 23:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/06/20 05:58	08/06/20 23:06	1
Chromium	<0.025		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:06	1
Iron	<0.40		0.40	0.20	mg/L		08/06/20 05:58	08/06/20 23:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B13
Date Collected: 07/24/20 12:20
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-10
Matrix: Solid
Percent Solids: 83.3

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		08/06/20 05:58	08/06/20 23:06	1
Manganese	**1.2**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:06	1
Nickel	<0.025		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.067**		0.050	0.010	mg/L		08/06/20 06:00	08/06/20 23:38	1
Barium	**0.57**		0.50	0.050	mg/L		08/06/20 06:00	08/06/20 23:38	1
Beryllium	**0.0055**		0.0040	0.0040	mg/L		08/06/20 06:00	08/06/20 23:38	1
Boron	**0.19**		0.10	0.050	mg/L		08/06/20 06:00	08/06/20 23:38	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/06/20 06:00	08/06/20 23:38	1
Calcium	**81**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:38	1
Chromium	**0.14**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:38	1
Cobalt	**0.041**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:38	1
Iron	**130**		0.40	0.20	mg/L		08/06/20 06:00	08/06/20 23:38	1
Lead	**0.069**		0.0075	0.0075	mg/L		08/06/20 06:00	08/06/20 23:38	1
Manganese	**0.61**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:38	1
Nickel	**0.16**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:38	1
Potassium	**30**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:38	1
Selenium	<0.050		0.050	0.020	mg/L		08/06/20 06:00	08/06/20 23:38	1
Silver	<0.025		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:38	1
Zinc	**0.33**	**J**	0.50	0.020	mg/L		08/06/20 06:00	08/06/20 23:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/06/20 05:58	08/07/20 12:26	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		08/06/20 06:00	08/06/20 15:39	1
Thallium	**0.0027**		0.0020	0.0020	mg/L		08/06/20 06:00	08/06/20 15:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/06/20 09:15	08/07/20 09:35	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	☼	08/04/20 13:35	08/05/20 07:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.21	mg/Kg	☼	08/05/20 10:40	08/05/20 14:37	1
pH	**8.3**		0.2	0.2	SU			07/30/20 18:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B15
Date Collected: 07/24/20 12:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-13
Matrix: Solid
Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Acetone	**0.043**		0.017	0.0074	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Chloroethane	<0.0042	*	0.0042	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Methylene Chloride	**0.0033**	**J**	0.0042	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 134*	*07/24/20 17:55*	*07/31/20 15:48*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*07/24/20 17:55*	*07/31/20 15:48*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*07/24/20 17:55*	*07/31/20 15:48*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*07/24/20 17:55*	*07/31/20 15:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1

Client Sample ID: 3481-1-B15
Date Collected: 07/24/20 12:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-13
Matrix: Solid
Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Benzo[a]anthracene	**0.018**	**J**	0.038	0.0051	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Benzo[a]pyrene	**0.026**	**J**	0.038	0.0074	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Benzo[b]fluoranthene	**0.058**		0.038	0.0083	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.038	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Chrysene	**0.034**	**J**	0.038	0.010	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Fluoranthene	**0.036**	**J**	0.038	0.0071	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1

Client Sample ID: 3481-1-B15

Date Collected: 07/24/20 12:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-13

Matrix: Solid
Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.011**	**J**	0.038	0.0099	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Phenanthrene	**0.026**	**J**	0.038	0.0053	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1
Pyrene	**0.030**	**J**	0.038	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*110*		*31 - 143*	*08/06/20 07:19*	*08/07/20 04:27*	*1*
2-Fluorobiphenyl	*74*		*43 - 145*	*08/06/20 07:19*	*08/07/20 04:27*	*1*
2-Fluorophenol	*68*		*31 - 166*	*08/06/20 07:19*	*08/07/20 04:27*	*1*
Nitrobenzene-d5	*49*		*37 - 147*	*08/06/20 07:19*	*08/07/20 04:27*	*1*
Phenol-d5	*67*		*30 - 153*	*08/06/20 07:19*	*08/07/20 04:27*	*1*
Terphenyl-d14	*125*		*42 - 157*	*08/06/20 07:19*	*08/07/20 04:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.98**	**J B**	1.1	0.22	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Arsenic	**5.0**		0.56	0.19	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Barium	**82**		0.56	0.064	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Beryllium	**0.77**		0.22	0.052	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Boron	**9.2**		2.8	0.26	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Cadmium	**0.047**	**J B**	0.11	0.020	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Calcium	**28000**	**B**	11	1.9	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Chromium	**18**		0.56	0.28	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Cobalt	**11**		0.28	0.073	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Copper	**16**		0.56	0.16	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Iron	**17000**		11	5.8	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Lead	**20**		0.28	0.13	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Magnesium	**15000**		5.6	2.8	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Manganese	**220**		0.56	0.081	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Nickel	**25**		0.56	0.16	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Potassium	**2400**		28	9.9	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Sodium	**1500**	**B**	56	8.2	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Vanadium	**29**		0.28	0.066	mg/Kg	☼	08/03/20 07:37	08/04/20 00:10	1
Zinc	**58**		1.1	0.49	mg/Kg	☼	08/03/20 07:37	08/04/20 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		08/06/20 05:58	08/06/20 23:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/06/20 05:58	08/06/20 23:12	1
Chromium	<0.025		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:12	1
Iron	<0.40		0.40	0.20	mg/L		08/06/20 05:58	08/06/20 23:12	1

Client Sample ID: 3481-1-B15

Date Collected: 07/24/20 12:40
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-13

Matrix: Solid
Percent Solids: 83.8

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		08/06/20 05:58	08/06/20 23:12	1
Manganese	**7.7**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:12	1
Nickel	**0.022**	**J**	0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.068**		0.050	0.010	mg/L		08/06/20 06:00	08/06/20 23:45	1
Barium	**0.95**		0.50	0.050	mg/L		08/06/20 06:00	08/06/20 23:45	1
Beryllium	**0.0076**		0.0040	0.0040	mg/L		08/06/20 06:00	08/06/20 23:45	1
Boron	**0.17**		0.10	0.050	mg/L		08/06/20 06:00	08/06/20 23:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/06/20 06:00	08/06/20 23:45	1
Calcium	**56**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:45	1
Chromium	**0.19**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:45	1
Cobalt	**0.065**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:45	1
Iron	**190**		0.40	0.20	mg/L		08/06/20 06:00	08/06/20 23:45	1
Lead	**0.24**		0.0075	0.0075	mg/L		08/06/20 06:00	08/06/20 23:45	1
Manganese	**1.9**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:45	1
Nickel	**0.20**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:45	1
Potassium	**31**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:45	1
Selenium	<0.050		0.050	0.020	mg/L		08/06/20 06:00	08/06/20 23:45	1
Silver	<0.025		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:45	1
Zinc	**0.47**	**J**	0.50	0.020	mg/L		08/06/20 06:00	08/06/20 23:45	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		08/06/20 05:58	08/07/20 12:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/06/20 06:00	08/06/20 15:43	1
Thallium	**0.0028**		0.0020	0.0020	mg/L		08/06/20 06:00	08/06/20 15:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0010		0.0010	0.0010	mg/L		08/06/20 09:15	08/07/20 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.018	0.0061	mg/Kg	☼	08/04/20 13:35	08/05/20 07:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.25	mg/Kg	☼	08/04/20 12:45	08/04/20 15:01	1
pH	**8.9**		0.2	0.2	SU			07/30/20 18:39	1

Client Sample ID: 3481-1-B16

Date Collected: 07/24/20 13:00
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-14

Matrix: Solid
Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00084	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
1,1-Dichloroethane	<0.0019		0.0019	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
1,1-Dichloroethene	<0.0019		0.0019	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
2-Butanone (MEK)	**0.0037**	**J**	0.0049	0.0022	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Acetone	**0.022**		0.019	0.0085	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Benzene	<0.0019		0.0019	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Bromodichloromethane	<0.0019		0.0019	0.00040	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Bromoform	<0.0019		0.0019	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Bromomethane	<0.0049	*	0.0049	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Carbon tetrachloride	<0.0019		0.0019	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Chlorobenzene	<0.0019		0.0019	0.00072	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Chloroethane	<0.0049	*	0.0049	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Chloroform	<0.0019		0.0019	0.00068	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Dibromochloromethane	<0.0019		0.0019	0.00064	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Ethylbenzene	<0.0019		0.0019	0.00093	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Methylene Chloride	**0.0019**	**J**	0.0049	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Styrene	<0.0019		0.0019	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Trichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Vinyl chloride	<0.0019		0.0019	0.00086	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 134*	*07/24/20 17:55*	*07/31/20 16:13*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/24/20 17:55*	*07/31/20 16:13*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*07/24/20 17:55*	*07/31/20 16:13*	*1*
Toluene-d8 (Surr)	*89*		*75 - 124*	*07/24/20 17:55*	*07/31/20 16:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B16
Date Collected: 07/24/20 13:00
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-14
Matrix: Solid
Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

Client Sample ID: 3481-1-B16
Date Collected: 07/24/20 13:00
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-14
Matrix: Solid
Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Phenol	<0.21		0.21	0.092	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	08/06/20 07:19	08/07/20 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*80*		*31 - 143*	*08/06/20 07:19*	*08/07/20 04:54*	*1*
2-Fluorobiphenyl	*50*		*43 - 145*	*08/06/20 07:19*	*08/07/20 04:54*	*1*
2-Fluorophenol	*57*		*31 - 166*	*08/06/20 07:19*	*08/07/20 04:54*	*1*
Nitrobenzene-d5	*43*		*37 - 147*	*08/06/20 07:19*	*08/07/20 04:54*	*1*
Phenol-d5	*51*		*30 - 153*	*08/06/20 07:19*	*08/07/20 04:54*	*1*
Terphenyl-d14	*98*		*42 - 157*	*08/06/20 07:19*	*08/07/20 04:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.3**	**B**	1.2	0.24	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Arsenic	**9.1**		0.61	0.21	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Barium	**120**		0.61	0.070	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Beryllium	**0.92**		0.24	0.057	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Boron	**8.1**		3.1	0.28	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Cadmium	**0.15**	**B**	0.12	0.022	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Calcium	**7900**	**B**	12	2.1	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Chromium	**21**		0.61	0.30	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Cobalt	**13**		0.31	0.080	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Copper	**18**		0.61	0.17	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Iron	**22000**		12	6.4	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Lead	**17**		0.31	0.14	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Magnesium	**7000**		6.1	3.0	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Manganese	**320**		0.61	0.089	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Nickel	**32**		0.61	0.18	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Potassium	**2000**		31	11	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Selenium	**0.38**	**J**	0.61	0.36	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Silver	<0.31		0.31	0.079	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Sodium	**1400**	**B**	61	9.0	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Thallium	<0.61		0.61	0.31	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Vanadium	**37**		0.31	0.072	mg/Kg	☼	08/03/20 07:37	08/04/20 00:14	1
Zinc	**74**		1.2	0.54	mg/Kg	☼	08/03/20 07:37	08/04/20 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		08/06/20 05:58	08/06/20 23:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/06/20 05:58	08/06/20 23:15	1
Chromium	<0.025		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:15	1
Iron	**2.8**		0.40	0.20	mg/L		08/06/20 05:58	08/06/20 23:15	1

Client Sample ID: 3481-1-B16
Date Collected: 07/24/20 13:00
Date Received: 07/24/20 16:30

Lab Sample ID: 500-185456-14
Matrix: Solid
Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/06/20 05:58	08/06/20 23:15	1
Manganese	**14**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:15	1
Nickel	**0.065**		0.025	0.010	mg/L		08/06/20 05:58	08/06/20 23:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.066**		0.050	0.010	mg/L		08/06/20 06:00	08/06/20 23:49	1
Barium	**1.3**		0.50	0.050	mg/L		08/06/20 06:00	08/06/20 23:49	1
Beryllium	**0.0083**		0.0040	0.0040	mg/L		08/06/20 06:00	08/06/20 23:49	1
Boron	**0.18**		0.10	0.050	mg/L		08/06/20 06:00	08/06/20 23:49	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/06/20 06:00	08/06/20 23:49	1
Calcium	**23**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:49	1
Chromium	**0.22**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:49	1
Cobalt	**0.087**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:49	1
Iron	**210**		0.40	0.20	mg/L		08/06/20 06:00	08/06/20 23:49	1
Lead	**0.078**		0.0075	0.0075	mg/L		08/06/20 06:00	08/06/20 23:49	1
Manganese	**2.0**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:49	1
Nickel	**0.26**		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:49	1
Potassium	**29**		2.5	0.50	mg/L		08/06/20 06:00	08/06/20 23:49	1
Selenium	<0.050		0.050	0.020	mg/L		08/06/20 06:00	08/06/20 23:49	1
Silver	<0.025		0.025	0.010	mg/L		08/06/20 06:00	08/06/20 23:49	1
Zinc	**0.57**		0.50	0.020	mg/L		08/06/20 06:00	08/06/20 23:49	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		08/06/20 05:58	08/07/20 12:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/06/20 06:00	08/06/20 15:45	1
Thallium	**0.0027**		0.0020	0.0020	mg/L		08/06/20 06:00	08/06/20 15:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0010		0.0010	0.0010	mg/L		08/06/20 09:15	08/07/20 09:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.020	0.0066	mg/Kg	☼	08/04/20 13:35	08/05/20 07:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.28	mg/Kg	☼	08/04/20 12:45	08/04/20 15:01	1
pH	**7.7**		0.2	0.2	SU			07/30/20 18:42	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185456-1

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
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control 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 recovery exceeds control limits

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL.
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
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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.
Job ID: 500-185456-1
Project/Site: IDOT - AE7-038

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-20 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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

500-185456 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~~ - 38A
Project No.: PTB/WO, 184-006 / 38A

TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other

Sampler: JOSHUA HEY

COC No.: 1 of 2
Lab Job No.: 500-185456
Sample Temp: 13.4/1.8

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	3481-1-B01	7-24	0940	S	X	X					X	X	X	X	X					
2	3481-1-B02		1000																	
3	3481-1-B03		1015																	
4	3481-1-B04		1035																	
5	3481-1-B05		1055																	
6	3481-1-B08		1120																	
7	3481-1-B11		1140																	
8	3481-1-B12		1155																	
9	3481-1-B13 DUP		1200																	
10	3481-1-B13		1220																	
11	3481-1-B14		1230	↓	↓	↓					↓	↓	↓	↓	↓					
12	TRIP BLANK #2	↓																		

Relinquished by:	Date/Time 7/24/20 1530	Received by:	Date/Time 7/24/20 1538
Relinquished by:	Date/Time 7/24/20 1630	Received by:	Date/Time 7/24/20 1630
Relinquished by:	Date/Time	Received by:	Date/Time

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 -38A Project No.: PTB/WO.184-006 / 38A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** JOSHUA HEY	COC No.: 2 of 2 Lab Job No.: 500-185456 Sample Temp:

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds 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	3481-1-B15	7-24	1240	S	X	X					X	X	X	X	X					
	~~3481-1-~~			↓	↓	↓					↓	↓	↓	↓	↓					
	~~3481-1-~~																			
	~~3481-1-~~																			
	~~3481-1-~~																			
	~~3481-1-~~																			
	~~3481-1-~~																			
	~~3481-1-~~																			
14	3481-1-B16	7-24	1300																	
				↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 7/24/20 1530	Received by:	Date/Time 7/24/20 1530
Relinquished by:	Date/Time 7/24/20 1630	Received by:	Date/Time 7/24/20 1630
Relinquished by:	Date/Time	Received by:	Date/Time

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-185507-1
Client Project/Site: IDOT - AE7-038

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/13/2020 3:42:17 PM

Richard Wright, Senior Project Manager
(708)746-0045
Richard.Wright@Eurofinset.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B23-1
Date Collected: 07/27/20 10:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-1
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	<0.0018		0.0018	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Bromomethane	<0.0044	*	0.0044	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*07/27/20 15:45*	*07/31/20 17:55*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*07/27/20 15:45*	*07/31/20 17:55*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*07/27/20 15:45*	*07/31/20 17:55*	*1*
Toluene-d8 (Surr)	*89*		*75 - 124*	*07/27/20 15:45*	*07/31/20 17:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20	F1 F2	0.20	0.042	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
1,2-Dichlorobenzene	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
1,3-Dichlorobenzene	<0.20	F1 F2	0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
1,4-Dichlorobenzene	<0.20	F1 F2	0.20	0.050	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2,2'-oxybis[1-chloropropane]	<0.20	F2	0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1

Client Sample ID: 3481-1-B23-1
Date Collected: 07/27/20 10:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-1
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	F2	0.39	0.089	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2,4,6-Trichlorophenol	<0.39	F1 F2	0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2,4-Dichlorophenol	<0.39	F1 F2	0.39	0.092	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2,4-Dimethylphenol	<0.39	F1 F2	0.39	0.15	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2,4-Dinitrophenol	<0.78	F2	0.78	0.68	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2,4-Dinitrotoluene	<0.20	F1 F2	0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2,6-Dinitrotoluene	<0.20	F1 F2	0.20	0.076	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2-Chloronaphthalene	<0.20	F1 F2	0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2-Chlorophenol	<0.20	F1 F2	0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2-Methylnaphthalene	<0.078	F1 F2	0.078	0.0071	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2-Methylphenol	<0.20	F1 F2	0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2-Nitroaniline	<0.20	F1 F2	0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
2-Nitrophenol	<0.39	F1 F2	0.39	0.092	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
3 & 4 Methylphenol	<0.20	F1 F2	0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
3,3'-Dichlorobenzidine	<0.20	F1 F2	0.20	0.054	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
3-Nitroaniline	<0.39	F2	0.39	0.12	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
4,6-Dinitro-2-methylphenol	<0.78	F2	0.78	0.31	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
4-Bromophenyl phenyl ether	<0.20	F1 F2	0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
4-Chloro-3-methylphenol	<0.39	F1 F2	0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
4-Chloroaniline	<0.78	F2	0.78	0.18	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
4-Chlorophenyl phenyl ether	<0.20	F1 F2	0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
4-Nitroaniline	<0.39	F1 F2	0.39	0.16	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
4-Nitrophenol	<0.78	F1 F2	0.78	0.37	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Acenaphthene	<0.039	F1 F2	0.039	0.0070	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Acenaphthylene	<0.039	F1 F2	0.039	0.0051	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Anthracene	<0.039	F1 F2	0.039	0.0065	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Benzo[a]anthracene	**0.013**	**J F1 F2**	0.039	0.0052	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Benzo[a]pyrene	**0.014**	**J F1 F2**	0.039	0.0075	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Benzo[b]fluoranthene	**0.018**	**J F1 F2**	0.039	0.0084	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Benzo[g,h,i]perylene	<0.039	F1 F2	0.039	0.013	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Benzo[k]fluoranthene	<0.039	F1 F2	0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Bis(2-chloroethoxy)methane	<0.20	F1 F2	0.20	0.040	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Bis(2-chloroethyl)ether	<0.20	F1 F2	0.20	0.058	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Bis(2-ethylhexyl) phthalate	<0.20	F1 F2	0.20	0.071	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Butyl benzyl phthalate	<0.20	F1 F2	0.20	0.074	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Carbazole	<0.20	F1 F2	0.20	0.097	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Chrysene	**0.012**	**J F1 F2**	0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Dibenz(a,h)anthracene	<0.039	F1 F2	0.039	0.0075	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Dibenzofuran	<0.20	F1 F2	0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Diethyl phthalate	<0.20	F2	0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Dimethyl phthalate	<0.20	F1 F2	0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Di-n-butyl phthalate	<0.20	F1 F2	0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Di-n-octyl phthalate	<0.20	F1 F2	0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Fluoranthene	**0.017**	**J F1 F2**	0.039	0.0072	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Fluorene	<0.039	F1 F2	0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Hexachlorobenzene	<0.078	F1 F2	0.078	0.0090	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Hexachlorobutadiene	<0.20	F2	0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Hexachlorocyclopentadiene	<0.78	F2	0.78	0.22	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Hexachloroethane	<0.20	F1 F2	0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1

Client Sample ID: 3481-1-B23-1
Date Collected: 07/27/20 10:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-1
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	**0.010**	**J F1 F2**	0.039	0.010	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Isophorone	<0.20	F1 F2	0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Naphthalene	<0.039	F1 F2	0.039	0.0060	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Nitrobenzene	<0.039	F1 F2	0.039	0.0097	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
N-Nitrosodi-n-propylamine	<0.078	F1 F2	0.078	0.047	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
N-Nitrosodiphenylamine	<0.20	F1 F2	0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Pentachlorophenol	<0.78	F2	0.78	0.62	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Phenanthrene	**0.0058**	**J F1 F2**	0.039	0.0054	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Phenol	<0.20	F1 F2	0.20	0.086	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1
Pyrene	**0.015**	**J F1 F2**	0.039	0.0077	mg/Kg	☼	08/07/20 07:26	08/07/20 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*111*		*31 - 143*	*08/07/20 07:26*	*08/07/20 23:47*	*1*
2-Fluorobiphenyl	*105*		*43 - 145*	*08/07/20 07:26*	*08/07/20 23:47*	*1*
2-Fluorophenol	*93*		*31 - 166*	*08/07/20 07:26*	*08/07/20 23:47*	*1*
Nitrobenzene-d5	*86*		*37 - 147*	*08/07/20 07:26*	*08/07/20 23:47*	*1*
Phenol-d5	*80*		*30 - 153*	*08/07/20 07:26*	*08/07/20 23:47*	*1*
Terphenyl-d14	*121*		*42 - 157*	*08/07/20 07:26*	*08/07/20 23:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**	**J F1**	1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Arsenic	**8.6**		0.58	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Barium	**92**		0.58	0.067	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Beryllium	**0.91**		0.23	0.054	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Boron	**5.6**	**F1**	2.9	0.27	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Cadmium	**0.030**	**J F1 B**	0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Calcium	**9000**	**F2**	12	2.0	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Chromium	**19**		0.58	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Cobalt	**10**		0.29	0.076	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Copper	**17**		0.58	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Iron	**21000**		12	6.1	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Lead	**22**	**F1**	0.29	0.13	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Magnesium	**6700**	**F2**	5.8	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Manganese	**410**	**F2 B**	0.58	0.085	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Nickel	**25**		0.58	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Potassium	**1400**	**F2 F1**	29	10	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Selenium	<0.58	F1	0.58	0.34	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Silver	<0.29	F1	0.29	0.075	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Sodium	**830**		58	8.6	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Vanadium	**35**		0.29	0.069	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	1
Zinc	**74**	**B**	1.2	0.51	mg/Kg	☼	08/04/20 18:04	08/05/20 12:37	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		08/07/20 06:00	08/09/20 20:05	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:05	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:00	08/09/20 20:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:00	08/09/20 20:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B23-1
Date Collected: 07/27/20 10:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-1
Matrix: Solid
Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.29**		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:05	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.050**		0.050	0.010	mg/L		08/07/20 06:05	08/10/20 07:52	1
Barium	**0.94**		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 20:25	1
Beryllium	**0.0077**		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 20:25	1
Boron	**0.12**		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 20:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/10/20 00:17	1
Calcium	**34**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:25	1
Chromium	**0.21**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:25	1
Cobalt	**0.040**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:25	1
Iron	**220**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 20:25	1
Lead	**0.099**		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 20:25	1
Manganese	**1.5**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:25	1
Nickel	**0.18**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:25	1
Potassium	**16**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:25	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 20:25	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:25	1
Zinc	**0.63**		0.50	0.020	mg/L		08/07/20 06:05	08/09/20 20:25	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		08/07/20 06:00	08/10/20 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/07/20 06:05	08/07/20 13:48	1
Thallium	**0.0027**		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 13:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/07/20 10:30	08/10/20 08:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.050**		0.018	0.0061	mg/Kg	☼	08/05/20 14:00	08/06/20 07:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.28	mg/Kg	☼	08/09/20 12:45	08/09/20 14:57	1
pH	**9.0**		0.2	0.2	SU			07/31/20 19:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B23-2
Date Collected: 07/27/20 10:35
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-2
Matrix: Solid
Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Acetone	**0.014**	**J**	0.017	0.0074	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Chloroethane	<0.0042	*	0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/27/20 15:45	07/31/20 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 134*	*07/27/20 15:45*	*07/31/20 18:20*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/27/20 15:45*	*07/31/20 18:20*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*07/27/20 15:45*	*07/31/20 18:20*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*07/27/20 15:45*	*07/31/20 18:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B23-2
Date Collected: 07/27/20 10:35
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-2
Matrix: Solid
Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B23-2
Date Collected: 07/27/20 10:35
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-2
Matrix: Solid
Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	08/07/20 07:26	08/08/20 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*99*		*31 - 143*	*08/07/20 07:26*	*08/08/20 00:14*	*1*
2-Fluorobiphenyl	*69*		*43 - 145*	*08/07/20 07:26*	*08/08/20 00:14*	*1*
2-Fluorophenol	*69*		*31 - 166*	*08/07/20 07:26*	*08/08/20 00:14*	*1*
Nitrobenzene-d5	*58*		*37 - 147*	*08/07/20 07:26*	*08/08/20 00:14*	*1*
Phenol-d5	*61*		*30 - 153*	*08/07/20 07:26*	*08/08/20 00:14*	*1*
Terphenyl-d14	*95*		*42 - 157*	*08/07/20 07:26*	*08/08/20 00:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**		1.1	0.22	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Arsenic	**11**		0.57	0.19	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Barium	**52**		0.57	0.065	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Beryllium	**0.86**		0.23	0.053	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Boron	**14**		2.8	0.26	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Cadmium	**0.069**	**J B**	0.11	0.020	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Calcium	**63000**	**B**	110	19	mg/Kg	☼	08/04/20 18:04	08/06/20 10:32	10
Chromium	**20**		0.57	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Cobalt	**14**		0.28	0.074	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Copper	**19**		0.57	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Iron	**22000**		11	5.9	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Lead	**13**		0.28	0.13	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Magnesium	**24000**		5.7	2.8	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Manganese	**380**	**B**	0.57	0.082	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Nickel	**36**		0.57	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Potassium	**3000**		28	10	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Sodium	**290**		57	8.4	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Thallium	**0.41**	**J**	0.57	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Vanadium	**26**		0.28	0.067	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1
Zinc	**66**	**B**	1.1	0.50	mg/Kg	☼	08/04/20 18:04	08/05/20 12:56	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/07/20 06:00	08/09/20 20:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:00	08/09/20 20:08	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:08	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:00	08/09/20 20:08	1

Client Sample ID: 3481-1-B23-2
Date Collected: 07/27/20 10:35
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-2
Matrix: Solid
Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:00	08/09/20 20:08	1
Manganese	**0.98**		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:08	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.074**		0.050	0.010	mg/L		08/07/20 06:05	08/09/20 20:29	1
Barium	**0.41**	**J**	0.50	0.050	mg/L		08/07/20 06:05	08/09/20 20:29	1
Beryllium	**0.0048**		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 20:29	1
Boron	**0.14**		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 20:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 20:29	1
Calcium	**54**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:29	1
Chromium	**0.11**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:29	1
Cobalt	**0.036**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:29	1
Iron	**130**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 20:29	1
Lead	**0.060**		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 20:29	1
Manganese	**0.55**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:29	1
Nickel	**0.13**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:29	1
Potassium	**25**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:29	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 20:29	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:29	1
Zinc	**0.30**	**J**	0.50	0.020	mg/L		08/07/20 06:05	08/09/20 20:29	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		08/07/20 06:05	08/07/20 13:51	1
Thallium	**0.0020**		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 13:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/07/20 10:30	08/10/20 08:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.020	0.0065	mg/Kg	☼	08/05/20 14:00	08/06/20 07:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.29	mg/Kg	☼	08/09/20 12:45	08/09/20 14:57	1
pH	**8.5**		0.2	0.2	SU			07/31/20 19:23	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B23-3
Date Collected: 07/27/20 10:40
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-3
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Bromomethane	<0.0041	*	0.0041	0.0015	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	07/27/20 15:45	07/31/20 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*07/27/20 15:45*	*07/31/20 18:46*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*07/27/20 15:45*	*07/31/20 18:46*	*1*
Dibromofluoromethane	*99*		*75 - 126*	*07/27/20 15:45*	*07/31/20 18:46*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*07/27/20 15:45*	*07/31/20 18:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1

Client Sample ID: 3481-1-B23-3
Date Collected: 07/27/20 10:40
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-3
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Benzo[a]anthracene	**0.0081**	**J**	0.039	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Chrysene	**0.014**	**J**	0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1

Client Sample ID: 3481-1-B23-3
Date Collected: 07/27/20 10:40
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-3
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Phenanthrene	**0.034**	**J**	0.039	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1
Pyrene	**0.015**	**J**	0.039	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*98*		*31 - 143*	*08/07/20 07:26*	*08/08/20 00:42*	*1*
2-Fluorobiphenyl	*90*		*43 - 145*	*08/07/20 07:26*	*08/08/20 00:42*	*1*
2-Fluorophenol	*87*		*31 - 166*	*08/07/20 07:26*	*08/08/20 00:42*	*1*
Nitrobenzene-d5	*80*		*37 - 147*	*08/07/20 07:26*	*08/08/20 00:42*	*1*
Phenol-d5	*75*		*30 - 153*	*08/07/20 07:26*	*08/08/20 00:42*	*1*
Terphenyl-d14	*107*		*42 - 157*	*08/07/20 07:26*	*08/08/20 00:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.0**	**J**	1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Arsenic	**5.3**		0.59	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Barium	**36**		0.59	0.067	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Beryllium	**0.94**		0.24	0.055	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Boron	**17**		3.0	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Calcium	**64000**	**B**	120	20	mg/Kg	☼	08/04/20 18:04	08/06/20 10:36	10
Chromium	**21**		0.59	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Cobalt	**14**		0.30	0.077	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Copper	**20**		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Iron	**20000**		12	6.2	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Lead	**14**		0.30	0.14	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Magnesium	**28000**		5.9	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Manganese	**330**	**B**	0.59	0.086	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Nickel	**36**		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Potassium	**3900**		30	10	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Silver	<0.30		0.30	0.076	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Sodium	**190**		59	8.8	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Thallium	**0.39**	**J**	0.59	0.30	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Vanadium	**23**		0.30	0.070	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	1
Zinc	**48**	**B**	1.2	0.52	mg/Kg	☼	08/04/20 18:04	08/05/20 13:00	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		08/07/20 06:05	08/09/20 20:33	1
Barium	<0.50		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 20:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 20:33	1
Boron	<0.10		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 20:33	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B23-3
Date Collected: 07/27/20 10:40
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-3
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 20:33	1
Calcium	**22**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:33	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:33	1
Cobalt	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:33	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 20:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 20:33	1
Manganese	**0.029**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:33	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:33	1
Potassium	**1.4**	**J**	2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:33	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 20:33	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:33	1
Zinc	<0.50		0.50	0.020	mg/L		08/07/20 06:05	08/09/20 20:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/07/20 06:05	08/07/20 13:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 13:54	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		08/07/20 10:30	08/10/20 08:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0063	mg/Kg	☼	08/05/20 14:00	08/06/20 07:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	08/09/20 12:45	08/09/20 14:58	1
pH	**7.9**		0.2	0.2	SU			07/31/20 19:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-1
Date Collected: 07/27/20 11:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-8
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	07/27/20 15:45	07/31/20 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 134*	*07/27/20 15:45*	*07/31/20 20:54*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*07/27/20 15:45*	*07/31/20 20:54*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*07/27/20 15:45*	*07/31/20 20:54*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*07/27/20 15:45*	*07/31/20 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	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1

Client Sample ID: 3481-1-B26-1
Date Collected: 07/27/20 11:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-8
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-1
Date Collected: 07/27/20 11:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-8
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	08/07/20 07:26	08/08/20 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*31 - 143*	*08/07/20 07:26*	*08/08/20 02:59*	*1*
2-Fluorobiphenyl	*54*		*43 - 145*	*08/07/20 07:26*	*08/08/20 02:59*	*1*
2-Fluorophenol	*56*		*31 - 166*	*08/07/20 07:26*	*08/08/20 02:59*	*1*
Nitrobenzene-d5	*45*		*37 - 147*	*08/07/20 07:26*	*08/08/20 02:59*	*1*
Phenol-d5	*55*		*30 - 153*	*08/07/20 07:26*	*08/08/20 02:59*	*1*
Terphenyl-d14	*107*		*42 - 157*	*08/07/20 07:26*	*08/08/20 02:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.89**	**J**	1.1	0.22	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Arsenic	**8.5**		0.57	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Barium	**83**		0.57	0.066	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Beryllium	**0.81**		0.23	0.054	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Boron	**6.6**		2.9	0.27	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Cadmium	**0.022**	**J B**	0.11	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Calcium	**4600**		11	1.9	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Chromium	**19**		0.57	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Cobalt	**11**		0.29	0.075	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Copper	**17**		0.57	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Iron	**20000**		11	6.0	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Lead	**15**		0.29	0.13	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Magnesium	**4900**		5.7	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Manganese	**440**	**B**	0.57	0.083	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Nickel	**36**		0.57	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Potassium	**1600**		29	10	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Selenium	**0.37**	**J**	0.57	0.34	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Sodium	**91**		57	8.5	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Vanadium	**32**		0.29	0.068	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	1
Zinc	**67**	**B**	1.1	0.50	mg/Kg	☼	08/04/20 18:04	08/05/20 13:32	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		08/07/20 06:05	08/09/20 20:53	1
Barium	<0.50		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 20:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 20:53	1
Boron	<0.10		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 20:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-1
Date Collected: 07/27/20 11:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-8
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 20:53	1
Calcium	**13**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:53	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:53	1
Cobalt	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:53	1
Iron	**1.3**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 20:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 20:53	1
Manganese	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:53	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:53	1
Potassium	**0.83**	**J**	2.5	0.50	mg/L		08/07/20 06:05	08/09/20 20:53	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 20:53	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 20:53	1
Zinc	<0.50		0.50	0.020	mg/L		08/07/20 06:05	08/09/20 20:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/07/20 06:05	08/07/20 14:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/07/20 10:30	08/10/20 09:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.035**		0.019	0.0063	mg/Kg	☼	08/05/20 14:00	08/06/20 07:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.26	mg/Kg	☼	08/09/20 12:45	08/09/20 15:02	1
pH	**7.7**		0.2	0.2	SU			07/31/20 19:40	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-2

Date Collected: 07/27/20 11:20
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-9

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	☼	07/27/20 15:45	08/03/20 15:04	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	07/27/20 15:45	08/03/20 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/27/20 15:45*	*08/03/20 15:04*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*07/27/20 15:45*	*08/03/20 15:04*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*07/27/20 15:45*	*08/03/20 15:04*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/27/20 15:45*	*08/03/20 15:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1

Client Sample ID: 3481-1-B26-2
Date Collected: 07/27/20 11:20
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-9
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	☼	08/07/20 07:26	08/08/20 03:27	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-2
Date Collected: 07/27/20 11:20
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-9
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	0.0099	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*31 - 143*	*08/07/20 07:26*	*08/08/20 03:27*	*1*
2-Fluorobiphenyl	*66*		*43 - 145*	*08/07/20 07:26*	*08/08/20 03:27*	*1*
2-Fluorophenol	*86*		*31 - 166*	*08/07/20 07:26*	*08/08/20 03:27*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*08/07/20 07:26*	*08/08/20 03:27*	*1*
Phenol-d5	*76*		*30 - 153*	*08/07/20 07:26*	*08/08/20 03:27*	*1*
Terphenyl-d14	*117*		*42 - 157*	*08/07/20 07:26*	*08/08/20 03:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**		1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Arsenic	**7.5**		0.59	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Barium	**63**		0.59	0.067	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Beryllium	**0.86**		0.23	0.055	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Boron	**15**		2.9	0.27	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Cadmium	**0.099**	**J B**	0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Calcium	**70000**	**B**	120	20	mg/Kg	☼	08/04/20 18:04	08/06/20 11:36	10
Chromium	**21**		0.59	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Cobalt	**12**		0.29	0.077	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Copper	**19**		0.59	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Iron	**20000**		12	6.1	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Lead	**13**		0.29	0.14	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Magnesium	**22000**		5.9	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Manganese	**290**	**B**	0.59	0.085	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Nickel	**34**		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Potassium	**3100**		29	10	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Selenium	**0.37**	**J**	0.59	0.34	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Sodium	**140**		59	8.7	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Vanadium	**28**		0.29	0.069	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	1
Zinc	**63**	**B**	1.2	0.51	mg/Kg	☼	08/04/20 18:04	08/05/20 13:36	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		08/07/20 06:00	08/09/20 20:39	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-2

Date Collected: 07/27/20 11:20
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-9

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		08/07/20 06:05	08/09/20 21:05	1
Barium	**0.059**	**J**	0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:05	1
Boron	**0.058**	**J**	0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:05	1
Calcium	**13**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:05	1
Chromium	**0.012**	**J**	0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:05	1
Cobalt	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:05	1
Iron	**9.9**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:05	1
Manganese	**0.043**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:05	1
Nickel	**0.011**	**J**	0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:05	1
Potassium	**4.1**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:05	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:05	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:05	1
Zinc	**0.025**	**J**	0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/07/20 06:05	08/07/20 14:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/07/20 10:30	08/10/20 09:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.019	0.0063	mg/Kg	☼	08/05/20 14:00	08/06/20 07:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.26	mg/Kg	☼	08/09/20 12:45	08/09/20 15:03	1
pH	**8.0**		0.2	0.2	SU			07/31/20 19:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3
Date Collected: 07/27/20 11:25
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-10
Matrix: Solid
Percent Solids: 82.5

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	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/27/20 15:45	07/31/20 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*07/27/20 15:45*	*07/31/20 21:45*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*07/27/20 15:45*	*07/31/20 21:45*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*07/27/20 15:45*	*07/31/20 21:45*	*1*
Toluene-d8 (Surr)	*93*		*75 - 124*	*07/27/20 15:45*	*07/31/20 21:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3
Date Collected: 07/27/20 11:25
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-10
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.039	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Chrysene	**0.019**	**J**	0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3
Date Collected: 07/27/20 11:25
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-10
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Phenanthrene	**0.020**	**J**	0.039	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1
Pyrene	**0.0093**	**J**	0.039	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*31 - 143*	*08/07/20 07:26*	*08/08/20 03:55*	*1*
2-Fluorobiphenyl	*93*		*43 - 145*	*08/07/20 07:26*	*08/08/20 03:55*	*1*
2-Fluorophenol	*87*		*31 - 166*	*08/07/20 07:26*	*08/08/20 03:55*	*1*
Nitrobenzene-d5	*80*		*37 - 147*	*08/07/20 07:26*	*08/08/20 03:55*	*1*
Phenol-d5	*77*		*30 - 153*	*08/07/20 07:26*	*08/08/20 03:55*	*1*
Terphenyl-d14	*115*		*42 - 157*	*08/07/20 07:26*	*08/08/20 03:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**		1.2	0.24	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Arsenic	**8.6**		0.60	0.21	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Barium	**21**		0.60	0.069	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Beryllium	**0.52**		0.24	0.057	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Boron	**10**		3.0	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Cadmium	**0.052**	**J B**	0.12	0.022	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Calcium	**96000**	**B**	120	21	mg/Kg	☼	08/04/20 18:04	08/06/20 11:40	10
Chromium	**12**		0.60	0.30	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Cobalt	**11**		0.30	0.079	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Copper	**21**		0.60	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Iron	**22000**		120	63	mg/Kg	☼	08/04/20 18:04	08/06/20 11:40	10
Lead	**13**		0.30	0.14	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Magnesium	**51000**		60	30	mg/Kg	☼	08/04/20 18:04	08/06/20 11:40	10
Manganese	**400**	**B**	0.60	0.088	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Nickel	**25**		0.60	0.18	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Potassium	**2000**		30	11	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Selenium	<0.60		0.60	0.36	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Silver	<0.30		0.30	0.078	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Sodium	**170**		60	9.0	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Thallium	**0.39**	**J**	0.60	0.30	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Vanadium	**15**		0.30	0.071	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1
Zinc	**39**	**B**	1.2	0.53	mg/Kg	☼	08/04/20 18:04	08/05/20 13:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/07/20 06:05	08/09/20 21:09	1
Barium	<0.50		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:09	1
Boron	<0.10		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3
Date Collected: 07/27/20 11:25
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-10
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:09	1
Calcium	**24**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:09	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:09	1
Cobalt	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:09	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:09	1
Manganese	**0.029**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:09	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:09	1
Potassium	**1.1**	**J**	2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:09	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:09	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:09	1
Zinc	<0.50		0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/07/20 06:05	08/07/20 14:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:20	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		08/07/20 10:30	08/10/20 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0063	mg/Kg	☼	08/05/20 14:00	08/06/20 07:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.30	mg/Kg	☼	08/09/20 12:45	08/09/20 15:03	1
pH	**8.2**		0.2	0.2	SU			07/31/20 19:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3 Dup

Date Collected: 07/27/20 11:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-11

Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	07/27/20 15:45	07/31/20 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 134*	*07/27/20 15:45*	*07/31/20 22:11*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/27/20 15:45*	*07/31/20 22:11*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*07/27/20 15:45*	*07/31/20 22:11*	*1*
Toluene-d8 (Surr)	*92*		*75 - 124*	*07/27/20 15:45*	*07/31/20 22:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3 Dup
Date Collected: 07/27/20 11:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-11
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.039	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Chrysene	**0.021**	**J**	0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3 Dup

Date Collected: 07/27/20 11:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-11

Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Phenanthrene	**0.024**	**J**	0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1
Pyrene	**0.016**	**J**	0.039	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 04:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*31 - 143*	*08/07/20 07:26*	*08/08/20 04:22*	*1*
2-Fluorobiphenyl	*94*		*43 - 145*	*08/07/20 07:26*	*08/08/20 04:22*	*1*
2-Fluorophenol	*82*		*31 - 166*	*08/07/20 07:26*	*08/08/20 04:22*	*1*
Nitrobenzene-d5	*76*		*37 - 147*	*08/07/20 07:26*	*08/08/20 04:22*	*1*
Phenol-d5	*72*		*30 - 153*	*08/07/20 07:26*	*08/08/20 04:22*	*1*
Terphenyl-d14	*106*		*42 - 157*	*08/07/20 07:26*	*08/08/20 04:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.0**	**J**	1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Arsenic	**8.6**		0.59	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Barium	**22**		0.59	0.068	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Beryllium	**0.51**		0.24	0.056	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Boron	**10**		3.0	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Cadmium	**0.045**	**J B**	0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Calcium	**90000**	**B**	120	20	mg/Kg	☼	08/04/20 18:04	08/06/20 11:44	10
Chromium	**12**		0.59	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Cobalt	**11**		0.30	0.078	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Copper	**20**		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Iron	**21000**		120	62	mg/Kg	☼	08/04/20 18:04	08/06/20 11:44	10
Lead	**13**		0.30	0.14	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Magnesium	**47000**		59	30	mg/Kg	☼	08/04/20 18:04	08/06/20 11:44	10
Manganese	**390**	**B**	0.59	0.086	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Nickel	**24**		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Potassium	**2000**		30	11	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Silver	<0.30		0.30	0.077	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Sodium	**170**		59	8.8	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Thallium	**0.33**	**J**	0.59	0.30	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Vanadium	**16**		0.30	0.070	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	1
Zinc	**38**	**B**	1.2	0.52	mg/Kg	☼	08/04/20 18:04	08/05/20 13:44	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		08/07/20 06:05	08/09/20 21:13	1
Barium	<0.50		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:13	1
Boron	<0.10		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:13	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B26-3 Dup
Date Collected: 07/27/20 11:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-11
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:13	1
Calcium	**24**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:13	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:13	1
Cobalt	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:13	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:13	1
Manganese	**0.039**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:13	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:13	1
Potassium	**1.1**	**J**	2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:13	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:13	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:13	1
Zinc	<0.50		0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:13	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		08/07/20 06:05	08/07/20 14:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:23	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		08/07/20 10:30	08/10/20 09:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.019	0.0063	mg/Kg	☼	08/05/20 14:00	08/06/20 07:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.28	mg/Kg	☼	08/09/20 12:45	08/09/20 15:04	1
pH	**8.2**		0.2	0.2	SU			07/31/20 19:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-1

Date Collected: 07/27/20 11:45
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-13

Matrix: Solid
Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00071	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
1,2-Dichloropropane	<0.0016		0.0016	0.00043	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Bromomethane	<0.0041	*	0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Toluene	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	07/27/20 15:45	07/31/20 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 134*	*07/27/20 15:45*	*07/31/20 23:02*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*07/27/20 15:45*	*07/31/20 23:02*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*07/27/20 15:45*	*07/31/20 23:02*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*07/27/20 15:45*	*07/31/20 23:02*	*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	☼	08/07/20 07:26	08/08/20 04:50	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-1
Date Collected: 07/27/20 11:45
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-13
Matrix: Solid
Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-1
Date Collected: 07/27/20 11:45
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-13
Matrix: Solid
Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	08/07/20 07:26	08/08/20 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*107*		*31 - 143*	*08/07/20 07:26*	*08/08/20 04:50*	*1*
2-Fluorobiphenyl	*99*		*43 - 145*	*08/07/20 07:26*	*08/08/20 04:50*	*1*
2-Fluorophenol	*86*		*31 - 166*	*08/07/20 07:26*	*08/08/20 04:50*	*1*
Nitrobenzene-d5	*79*		*37 - 147*	*08/07/20 07:26*	*08/08/20 04:50*	*1*
Phenol-d5	*74*		*30 - 153*	*08/07/20 07:26*	*08/08/20 04:50*	*1*
Terphenyl-d14	*111*		*42 - 157*	*08/07/20 07:26*	*08/08/20 04:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**		1.1	0.22	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Arsenic	**9.8**		0.57	0.19	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Barium	**100**		0.57	0.065	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Beryllium	**0.99**		0.23	0.053	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Boron	**3.8**		2.8	0.26	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Calcium	**2300**		11	1.9	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Chromium	**20**		0.57	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Cobalt	**15**		0.28	0.074	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Copper	**19**		0.57	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Iron	**24000**		11	5.9	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Lead	**20**		0.28	0.13	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Magnesium	**3300**		5.7	2.8	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Manganese	**410**	**B**	0.57	0.082	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Nickel	**36**		0.57	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Potassium	**1300**		28	10	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Selenium	**0.53**	**J**	0.57	0.33	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Sodium	**290**		57	8.4	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Vanadium	**35**		0.28	0.067	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1
Zinc	**68**	**B**	1.1	0.50	mg/Kg	☼	08/04/20 18:04	08/05/20 13:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/07/20 06:00	08/09/20 20:48	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:00	08/09/20 20:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:00	08/09/20 20:48	1
Manganese	**0.26**		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:48	1

Client Sample ID: 3481-1-B24-1

Date Collected: 07/27/20 11:45
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-13

Matrix: Solid
Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.061**		0.050	0.010	mg/L		08/07/20 06:05	08/09/20 21:17	1
Barium	**0.39**	**J**	0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:17	1
Beryllium	**0.0040**		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:17	1
Boron	**0.10**		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:17	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:17	1
Calcium	**10**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:17	1
Chromium	**0.098**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:17	1
Cobalt	**0.025**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:17	1
Iron	**110**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:17	1
Lead	**0.058**		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:17	1
Manganese	**0.37**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:17	1
Nickel	**0.11**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:17	1
Potassium	**11**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:17	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:17	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:17	1
Zinc	**0.24**	**J**	0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:17	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		08/07/20 06:05	08/07/20 14:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/07/20 10:30	08/10/20 09:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.060**		0.019	0.0062	mg/Kg	☼	08/05/20 14:00	08/06/20 07:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	08/09/20 12:45	08/09/20 15:04	1
pH	**7.4**		0.2	0.2	SU			07/31/20 19:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-2
Date Collected: 07/27/20 11:50
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-14
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	07/27/20 15:45	08/03/20 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*07/27/20 15:45*	*08/03/20 15:30*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*07/27/20 15:45*	*08/03/20 15:30*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*07/27/20 15:45*	*08/03/20 15:30*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/27/20 15:45*	*08/03/20 15:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-2
Date Collected: 07/27/20 11:50
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-14
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1

Client Sample ID: 3481-1-B24-2
Date Collected: 07/27/20 11:50
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-14
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	08/07/20 07:26	08/08/20 05:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*99*		*31 - 143*	*08/07/20 07:26*	*08/08/20 05:17*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*08/07/20 07:26*	*08/08/20 05:17*	*1*
2-Fluorophenol	*65*		*31 - 166*	*08/07/20 07:26*	*08/08/20 05:17*	*1*
Nitrobenzene-d5	*50*		*37 - 147*	*08/07/20 07:26*	*08/08/20 05:17*	*1*
Phenol-d5	*59*		*30 - 153*	*08/07/20 07:26*	*08/08/20 05:17*	*1*
Terphenyl-d14	*110*		*42 - 157*	*08/07/20 07:26*	*08/08/20 05:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**		1.1	0.22	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Arsenic	**7.0**		0.57	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Barium	**70**		0.57	0.065	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Beryllium	**0.94**		0.23	0.054	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Boron	**18**		2.9	0.27	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Cadmium	**0.061**	**J B**	0.11	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Calcium	**73000**	**B**	110	19	mg/Kg	☼	08/04/20 18:04	08/06/20 11:48	10
Chromium	**23**		0.57	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Cobalt	**13**		0.29	0.075	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Copper	**17**		0.57	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Iron	**20000**		11	6.0	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Lead	**12**		0.29	0.13	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Magnesium	**20000**		5.7	2.8	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Manganese	**290**	**B**	0.57	0.083	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Nickel	**35**		0.57	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Potassium	**3700**		29	10	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Sodium	**310**		57	8.5	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Vanadium	**31**		0.29	0.068	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	1
Zinc	**58**	**B**	1.1	0.50	mg/Kg	☼	08/04/20 18:04	08/05/20 13:52	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		08/07/20 06:00	08/09/20 20:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:00	08/09/20 20:51	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:51	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:00	08/09/20 20:51	1

Client Sample ID: 3481-1-B24-2
Date Collected: 07/27/20 11:50
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-14
Matrix: Solid
Percent Solids: 82.6

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		08/07/20 06:00	08/09/20 20:51	1
Manganese	**1.7**		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:51	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.065**		0.050	0.010	mg/L		08/07/20 06:05	08/09/20 21:21	1
Barium	**0.64**		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:21	1
Beryllium	**0.0060**		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:21	1
Boron	**0.19**		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:21	1
Calcium	**110**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:21	1
Chromium	**0.15**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:21	1
Cobalt	**0.048**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:21	1
Iron	**140**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:21	1
Lead	**0.077**		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:21	1
Manganese	**0.99**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:21	1
Nickel	**0.19**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:21	1
Potassium	**31**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:21	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:21	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:21	1
Zinc	**0.32**	**J**	0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:00	08/10/20 12:52	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		08/07/20 06:05	08/07/20 14:29	1
Thallium	**0.0022**		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/07/20 10:30	08/10/20 09:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.019	0.0065	mg/Kg	☼	08/05/20 14:00	08/06/20 07:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	08/09/20 12:45	08/09/20 15:04	1
pH	**8.4**		0.2	0.2	SU			07/31/20 19:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-3
Date Collected: 07/27/20 11:55
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-15
Matrix: Solid
Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Acetone	**0.0076**	**J**	0.017	0.0074	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Chloroethane	<0.0042	*	0.0042	0.0013	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/27/20 15:45	08/03/20 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/27/20 15:45*	*08/03/20 15:55*	*1*
4-Bromofluorobenzene (Surr)	*114*		*75 - 131*	*07/27/20 15:45*	*08/03/20 15:55*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*07/27/20 15:45*	*08/03/20 15:55*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*07/27/20 15:45*	*08/03/20 15:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1

Client Sample ID: 3481-1-B24-3
Date Collected: 07/27/20 11:55
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-15
Matrix: Solid
Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-3
Date Collected: 07/27/20 11:55
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-15
Matrix: Solid
Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Phenanthrene	**0.0093**	**J**	0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	08/07/20 07:26	08/08/20 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*31 - 143*	*08/07/20 07:26*	*08/08/20 05:45*	*1*
2-Fluorobiphenyl	*75*		*43 - 145*	*08/07/20 07:26*	*08/08/20 05:45*	*1*
2-Fluorophenol	*64*		*31 - 166*	*08/07/20 07:26*	*08/08/20 05:45*	*1*
Nitrobenzene-d5	*59*		*37 - 147*	*08/07/20 07:26*	*08/08/20 05:45*	*1*
Phenol-d5	*57*		*30 - 153*	*08/07/20 07:26*	*08/08/20 05:45*	*1*
Terphenyl-d14	*108*		*42 - 157*	*08/07/20 07:26*	*08/08/20 05:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.91**	**J**	1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Arsenic	**6.4**		0.59	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Barium	**29**		0.59	0.068	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Beryllium	**0.79**		0.24	0.055	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Boron	**15**		3.0	0.28	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Calcium	**73000**	**B**	120	20	mg/Kg	☼	08/04/20 18:04	08/06/20 11:52	10
Chromium	**17**		0.59	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Cobalt	**13**		0.30	0.078	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Copper	**20**		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Iron	**18000**		12	6.2	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Lead	**13**		0.30	0.14	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Magnesium	**31000**		5.9	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Manganese	**340**	**B**	0.59	0.086	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Nickel	**31**		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Potassium	**3300**		30	11	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Selenium	**0.42**	**J**	0.59	0.35	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Silver	<0.30		0.30	0.077	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Sodium	**180**		59	8.8	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Thallium	**0.40**	**J**	0.59	0.30	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Vanadium	**21**		0.30	0.070	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1
Zinc	**43**	**B**	1.2	0.52	mg/Kg	☼	08/04/20 18:04	08/05/20 14:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/07/20 06:05	08/09/20 21:25	1
Barium	<0.50		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:25	1
Boron	<0.10		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:25	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B24-3
Date Collected: 07/27/20 11:55
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-15
Matrix: Solid
Percent Solids: 83.1

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		08/07/20 06:05	08/09/20 21:25	1
Calcium	**23**	**F1**	2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:25	1
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:25	1
Cobalt	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:25	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:25	1
Manganese	**0.030**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:25	1
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:25	1
Potassium	**1.2**	**J**	2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:25	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:25	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:25	1
Zinc	<0.50		0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:25	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		08/07/20 06:05	08/07/20 14:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:32	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		08/07/20 10:30	08/10/20 09:31	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	☼	08/05/20 14:00	08/06/20 07:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.28	mg/Kg	☼	08/09/20 12:45	08/09/20 15:05	1
pH	**8.2**		0.2	0.2	SU			07/31/20 19:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B31
Date Collected: 07/27/20 12:05
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-16
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Chloroethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	07/27/20 15:45	08/03/20 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*07/27/20 15:45*	*08/03/20 16:20*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*07/27/20 15:45*	*08/03/20 16:20*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*07/27/20 15:45*	*08/03/20 16:20*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*07/27/20 15:45*	*08/03/20 16:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B31
Date Collected: 07/27/20 12:05
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-16
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B31
Date Collected: 07/27/20 12:05
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-16
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	08/07/20 07:26	08/08/20 06:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*43*		*31 - 143*	*08/07/20 07:26*	*08/08/20 06:12*	*1*
2-Fluorobiphenyl	*25*	*X*	*43 - 145*	*08/07/20 07:26*	*08/08/20 06:12*	*1*
2-Fluorophenol	*25*	*X*	*31 - 166*	*08/07/20 07:26*	*08/08/20 06:12*	*1*
Nitrobenzene-d5	*22*	*X*	*37 - 147*	*08/07/20 07:26*	*08/08/20 06:12*	*1*
Phenol-d5	*23*	*X*	*30 - 153*	*08/07/20 07:26*	*08/08/20 06:12*	*1*
Terphenyl-d14	*44*		*42 - 157*	*08/07/20 07:26*	*08/08/20 06:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.4**		1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Arsenic	**10**		0.58	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Barium	**100**		0.58	0.066	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Beryllium	**1.2**		0.23	0.054	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Boron	**8.7**		2.9	0.27	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Calcium	**2000**		12	2.0	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Chromium	**25**		0.58	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Cobalt	**17**		0.29	0.076	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Copper	**25**		0.58	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Iron	**27000**		12	6.1	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Lead	**19**		0.29	0.13	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Magnesium	**4300**		5.8	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Manganese	**560**	**B**	0.58	0.084	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Nickel	**49**		0.58	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Potassium	**2300**		29	10	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Selenium	**0.66**		0.58	0.34	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Sodium	**59**		58	8.6	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Vanadium	**38**		0.29	0.069	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	1
Zinc	**79**	**B**	1.2	0.51	mg/Kg	☼	08/04/20 18:04	08/05/20 14:08	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		08/07/20 06:00	08/09/20 20:57	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:00	08/09/20 20:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:00	08/09/20 20:57	1
Manganese	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:57	1

Client Sample ID: 3481-1-B31

Date Collected: 07/27/20 12:05
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-16

Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 20:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.055**		0.050	0.010	mg/L		08/07/20 06:05	08/09/20 21:41	1
Barium	**0.48**	**J**	0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:41	1
Boron	**0.12**		0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:41	1
Calcium	**10**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:41	1
Chromium	**0.10**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:41	1
Cobalt	**0.022**	**J**	0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:41	1
Iron	**120**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:41	1
Lead	**0.043**		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:41	1
Manganese	**0.67**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:41	1
Nickel	**0.14**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:41	1
Potassium	**14**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:41	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:41	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:41	1
Zinc	**0.24**	**J**	0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:41	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		08/07/20 06:00	08/10/20 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/07/20 06:05	08/07/20 14:50	1
Thallium	**0.0024**		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:50	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		08/07/20 10:30	08/10/20 09:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.046**		0.020	0.0065	mg/Kg	☼	08/05/20 14:00	08/06/20 07:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.30	mg/Kg	☼	08/09/20 12:45	08/09/20 15:06	1
pH	**7.8**		0.2	0.2	SU			07/31/20 20:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B32
Date Collected: 07/27/20 12:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-17
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	<0.0020		0.0020	0.00066	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Chloroethane	<0.0049	*	0.0049	0.0015	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*07/27/20 15:45*	*08/03/20 16:45*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*07/27/20 15:45*	*08/03/20 16:45*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*07/27/20 15:45*	*08/03/20 16:45*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/27/20 15:45*	*08/03/20 16:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B32
Date Collected: 07/27/20 12:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-17
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	<0.41		0.41	0.093	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1

Client Sample ID: 3481-1-B32
Date Collected: 07/27/20 12:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-17
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	<0.041		0.041	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	08/07/20 07:26	08/08/20 06:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*31 - 143*	*08/07/20 07:26*	*08/08/20 06:39*	*1*
2-Fluorobiphenyl	*68*		*43 - 145*	*08/07/20 07:26*	*08/08/20 06:39*	*1*
2-Fluorophenol	*75*		*31 - 166*	*08/07/20 07:26*	*08/08/20 06:39*	*1*
Nitrobenzene-d5	*71*		*37 - 147*	*08/07/20 07:26*	*08/08/20 06:39*	*1*
Phenol-d5	*69*		*30 - 153*	*08/07/20 07:26*	*08/08/20 06:39*	*1*
Terphenyl-d14	*119*		*42 - 157*	*08/07/20 07:26*	*08/08/20 06:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.84**	**J**	1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Arsenic	**6.6**		0.58	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Barium	**120**		0.58	0.067	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Beryllium	**0.71**		0.23	0.055	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Boron	**4.3**		2.9	0.27	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Cadmium	**0.028**	**J B**	0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Calcium	**2500**		12	2.0	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Chromium	**18**		0.58	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Cobalt	**9.9**		0.29	0.077	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Copper	**12**		0.58	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Iron	**17000**		12	6.1	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Lead	**17**		0.29	0.13	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Magnesium	**2600**		5.8	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Manganese	**580**	**B**	0.58	0.085	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Nickel	**16**		0.58	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Potassium	**1500**		29	10	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Selenium	**0.64**		0.58	0.34	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Sodium	**64**		58	8.6	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Vanadium	**34**		0.29	0.069	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1
Zinc	**58**	**B**	1.2	0.51	mg/Kg	☼	08/04/20 18:04	08/05/20 14:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 21:00	1
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:00	08/09/20 21:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:00	08/09/20 21:00	1
Manganese	**0.025**		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 21:00	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B32

Date Collected: 07/27/20 12:15
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-17

Matrix: Solid
Percent Solids: 81.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.032**	**J**	0.050	0.010	mg/L		08/07/20 06:05	08/09/20 21:53	1
Barium	**0.58**		0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:53	1
Boron	**0.080**	**J**	0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:53	1
Calcium	**17**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:53	1
Chromium	**0.11**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:53	1
Cobalt	**0.014**	**J**	0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:53	1
Iron	**97**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:53	1
Lead	**0.039**		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:53	1
Manganese	**0.37**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:53	1
Nickel	**0.061**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:53	1
Potassium	**12**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:53	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:53	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:53	1
Zinc	**0.29**	**J**	0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:53	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		08/07/20 06:05	08/07/20 14:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:53	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		08/07/20 10:30	08/10/20 09:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.030**		0.019	0.0064	mg/Kg	☼	08/05/20 14:00	08/06/20 07:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.62		0.62	0.31	mg/Kg	☼	08/09/20 12:45	08/09/20 15:06	1
pH	**7.1**		0.2	0.2	SU			07/31/20 20:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B33
Date Collected: 07/27/20 12:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-18
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Chloroethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	07/27/20 15:45	08/03/20 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*07/27/20 15:45*	*08/03/20 17:10*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*07/27/20 15:45*	*08/03/20 17:10*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*07/27/20 15:45*	*08/03/20 17:10*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*07/27/20 15:45*	*08/03/20 17:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B33
Date Collected: 07/27/20 12:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-18
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Benzo[a]anthracene	**0.013**	**J**	0.040	0.0054	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Benzo[a]pyrene	**0.018**	**J**	0.040	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Benzo[b]fluoranthene	**0.017**	**J**	0.040	0.0086	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.040	0.013	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Chrysene	**0.016**	**J**	0.040	0.011	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Fluoranthene	**0.022**	**J**	0.040	0.0074	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B33
Date Collected: 07/27/20 12:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-18
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.013	J	0.040	0.010	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Phenanthrene	0.0077	J	0.040	0.0055	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1
Pyrene	0.017	J	0.040	0.0079	mg/Kg	☼	08/07/20 07:26	08/08/20 07:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*31 - 143*	*08/07/20 07:26*	*08/08/20 07:06*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*08/07/20 07:26*	*08/08/20 07:06*	*1*
2-Fluorophenol	*78*		*31 - 166*	*08/07/20 07:26*	*08/08/20 07:06*	*1*
Nitrobenzene-d5	*70*		*37 - 147*	*08/07/20 07:26*	*08/08/20 07:06*	*1*
Phenol-d5	*71*		*30 - 153*	*08/07/20 07:26*	*08/08/20 07:06*	*1*
Terphenyl-d14	*120*		*42 - 157*	*08/07/20 07:26*	*08/08/20 07:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.97	J	1.2	0.23	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Arsenic	8.2		0.59	0.20	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Barium	95		0.59	0.067	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Beryllium	0.76		0.23	0.055	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Boron	6.5		2.9	0.27	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Cadmium	0.13	B	0.12	0.021	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Calcium	12000		12	2.0	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Chromium	18		0.59	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Cobalt	11		0.29	0.077	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Copper	16		0.59	0.16	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Iron	18000		12	6.1	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Lead	35		0.29	0.14	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Magnesium	8200		5.9	2.9	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Manganese	570	B	0.59	0.085	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Nickel	22		0.59	0.17	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Potassium	1700		29	10	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Silver	<0.29		0.29	0.076	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Sodium	71		59	8.7	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Vanadium	32		0.29	0.069	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1
Zinc	71	B	1.2	0.51	mg/Kg	☼	08/04/20 18:04	08/05/20 14:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		08/07/20 06:00	08/09/20 21:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/07/20 06:00	08/09/20 21:03	1
Manganese	0.082		0.025	0.010	mg/L		08/07/20 06:00	08/09/20 21:03	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Client Sample ID: 3481-1-B33

Date Collected: 07/27/20 12:30
Date Received: 07/27/20 13:45

Lab Sample ID: 500-185507-18

Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.024**	**J**	0.050	0.010	mg/L		08/07/20 06:05	08/09/20 21:57	1
Barium	**0.23**	**J**	0.50	0.050	mg/L		08/07/20 06:05	08/09/20 21:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/07/20 06:05	08/09/20 21:57	1
Boron	**0.070**	**J**	0.10	0.050	mg/L		08/07/20 06:05	08/09/20 21:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/07/20 06:05	08/09/20 21:57	1
Calcium	**14**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:57	1
Chromium	**0.046**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:57	1
Cobalt	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:57	1
Iron	**47**		0.40	0.20	mg/L		08/07/20 06:05	08/09/20 21:57	1
Lead	**0.039**		0.0075	0.0075	mg/L		08/07/20 06:05	08/09/20 21:57	1
Manganese	**0.26**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:57	1
Nickel	**0.036**		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:57	1
Potassium	**6.0**		2.5	0.50	mg/L		08/07/20 06:05	08/09/20 21:57	1
Selenium	<0.050		0.050	0.020	mg/L		08/07/20 06:05	08/09/20 21:57	1
Silver	<0.025		0.025	0.010	mg/L		08/07/20 06:05	08/09/20 21:57	1
Zinc	**0.13**	**J**	0.50	0.020	mg/L		08/07/20 06:05	08/09/20 21:57	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		08/07/20 06:05	08/07/20 14:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/07/20 06:05	08/07/20 14:56	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		08/07/20 10:30	08/10/20 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.019	0.0064	mg/Kg	☼	08/05/20 14:00	08/06/20 07:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.25	mg/Kg	☼	08/09/20 12:45	08/09/20 15:07	1
pH	**7.6**		0.2	0.2	SU			07/31/20 20:08	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control 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 recovery exceeds control limits

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 exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL.
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
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185507-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-21

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

Client Contact

Andrews Engineering, I
3300 Ginger Creek Driv
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

500-185507 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: AE7-38A
Project No.: PTB/WO: 184-006/38A
TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other
Sampler: ROBERT SENOW

COC No.: 1 of 2
Lab Job No.: 500-185507
Sample Temp: 7.3 | 1.4

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	3481-1-B23-1	7/27	1030	S	X	X					X	X	X	X	X					
2	3481-1-B23-2		1035																	
3	3481-1-B23-3		1040																	
4	3481-1-B21-1		1050																	
5	3481-1-B21-2		1055																	
6	3481-1-B21-2 DUP		1100																	
7	3481-1-B21-3		1105																	
8	3481-1-B26-1		1115																	
9	3481-1-B26-2		1120																	
10	3481-1-B26-3		1125																	
11	3481-1-B26-3 DUP		1130	↓	↓	↓					↓	↓	↓	↓	↓					
12	TRIP BLANK #3	↓																		

Relinquished by:		Date/Time 7/27 1345	Received by:	Date/Time 7/27/20 1345
Relinquished by:		Date/Time	Received by:	Date/Time
Relinquished by:		Date/Time	Received by:	Date/Time

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 – 38A

Project No.: PTB/WO: 184-006 /38A

TAT: ☑ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other

Sampler: ROBERT SENOW

COC No.: 2 of 2

Lab Job No.: 500-18557

Sample Temp: 2.3, 11.4

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
13	3481-1-B24-1	7-27	1145	S	X	X					X	X	X	X	X					
14	3481-1-B24-2	↓	1150	↓	↓	↓					↓	↓	↓	↓	↓					
15	3481-1-B24-3		1155																	
16	3481-1-B31		1205																	
17	3481-1-B32		1215																	
18	3481-1-B33	↓	1230																	
	~~3481-1-~~																			
	3481-1-																			
	~~3481-1-~~																			
	~~3481-1-~~																			
	~~3481-1-~~			↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 7/27 1345	Received by:	Date/Time 7/27/20 1345
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-185586-1
Client Project/Site: IDOT - AE7-038

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/14/2020 11:11:52 AM

Richard Wright, Senior Project Manager
(708)746-0045
Richard.Wright@Eurofinset.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B37
Date Collected: 07/28/20 13:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-1
Matrix: Solid
Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Chloromethane	<0.0050	*	0.0050	0.0020	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1
Xylenes, Total	<0.0040		0.0040	0.00063	mg/Kg	☼	07/29/20 18:30	08/04/20 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 134*	*07/29/20 18:30*	*08/04/20 17:39*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/29/20 18:30*	*08/04/20 17:39*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*07/29/20 18:30*	*08/04/20 17:39*	*1*
Toluene-d8 (Surr)	*84*		*75 - 124*	*07/29/20 18:30*	*08/04/20 17:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B37
Date Collected: 07/28/20 13:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-1
Matrix: Solid
Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B37
Date Collected: 07/28/20 13:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-1
Matrix: Solid
Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1
Pyrene	<0.042		0.042	0.0084	mg/Kg	☼	08/07/20 21:59	08/11/20 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*104*		*31 - 143*	*08/07/20 21:59*	*08/11/20 11:49*	*1*
2-Fluorobiphenyl	*90*		*43 - 145*	*08/07/20 21:59*	*08/11/20 11:49*	*1*
2-Fluorophenol	*78*		*31 - 166*	*08/07/20 21:59*	*08/11/20 11:49*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*08/07/20 21:59*	*08/11/20 11:49*	*1*
Phenol-d5	*65*		*30 - 153*	*08/07/20 21:59*	*08/11/20 11:49*	*1*
Terphenyl-d14	*102*		*42 - 157*	*08/07/20 21:59*	*08/11/20 11:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.85**	**J F1**	1.2	0.24	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Arsenic	**7.7**	**F1**	0.62	0.21	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Barium	**150**	**F1**	0.62	0.070	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Beryllium	**0.82**	**F1**	0.25	0.058	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Boron	**3.4**	**F1**	3.1	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Cadmium	**0.23**	**F1**	0.12	0.022	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Calcium	**22000**	**F2 B**	12	2.1	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Chromium	**17**		0.62	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Cobalt	**17**		0.31	0.081	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Copper	**24**		0.62	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Iron	**15000**	**B**	12	6.4	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Lead	**14**	**F1**	0.31	0.14	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Magnesium	**13000**	**F2**	6.2	3.1	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Manganese	**620**	**F2**	0.62	0.090	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Nickel	**25**		0.62	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Potassium	**740**	**F1**	31	11	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Selenium	<0.62	F1	0.62	0.36	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Silver	<0.31	F1	0.31	0.080	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Sodium	**180**		62	9.1	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Vanadium	**29**		0.31	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	1
Zinc	**61**	**F1**	1.2	0.54	mg/Kg	☼	08/05/20 18:14	08/06/20 14:42	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		08/08/20 05:46	08/10/20 00:15	1
Barium	<0.50		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:15	1
Boron	**0.055**	**J**	0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B37
Date Collected: 07/28/20 13:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-1
Matrix: Solid
Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:15	1
Calcium	**9.8**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:15	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:15	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:15	1
Iron	**1.2**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:15	1
Manganese	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:15	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:15	1
Potassium	**0.63**	**J**	2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:15	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:15	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:15	1
Zinc	<0.50		0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 13:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 10:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.035**		0.020	0.0068	mg/Kg	☼	08/06/20 13:10	08/07/20 08:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.34		0.34	0.17	mg/Kg	☼	08/11/20 10:28	08/11/20 14:17	1
pH	**8.7**		0.2	0.2	SU			08/03/20 19:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B36
Date Collected: 07/28/20 13:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-2
Matrix: Solid
Percent Solids: 78.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0023		0.0023	0.00076	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00073	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00098	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
1,1-Dichloroethane	<0.0023		0.0023	0.00078	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
1,1-Dichloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
1,2-Dichloroethane	<0.0057		0.0057	0.0018	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
1,2-Dichloropropane	<0.0023		0.0023	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00080	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
2-Butanone (MEK)	<0.0057		0.0057	0.0025	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
2-Hexanone	<0.0057		0.0057	0.0018	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
4-Methyl-2-pentanone (MIBK)	<0.0057		0.0057	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Acetone	<0.023		0.023	0.0099	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Benzene	<0.0023		0.0023	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Bromodichloromethane	<0.0023		0.0023	0.00046	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Bromoform	<0.0023		0.0023	0.00066	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Bromomethane	<0.0057		0.0057	0.0022	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Carbon disulfide	<0.0057		0.0057	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Carbon tetrachloride	<0.0023		0.0023	0.00066	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Chlorobenzene	<0.0023		0.0023	0.00084	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Chloroethane	<0.0057		0.0057	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Chloroform	<0.0023		0.0023	0.00079	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Chloromethane	<0.0057	*	0.0057	0.0023	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00064	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Dibromochloromethane	<0.0023		0.0023	0.00074	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00067	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Methylene Chloride	<0.0057		0.0057	0.0022	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Styrene	<0.0023		0.0023	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Tetrachloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Toluene	<0.0023		0.0023	0.00057	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00080	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Trichloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1
Xylenes, Total	<0.0046		0.0046	0.00073	mg/Kg	☼	07/29/20 18:30	08/04/20 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 134*	*07/29/20 18:30*	*08/04/20 18:05*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/29/20 18:30*	*08/04/20 18:05*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*07/29/20 18:30*	*08/04/20 18:05*	*1*
Toluene-d8 (Surr)	*87*		*75 - 124*	*07/29/20 18:30*	*08/04/20 18:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B36
Date Collected: 07/28/20 13:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-2
Matrix: Solid
Percent Solids: 78.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B36
Date Collected: 07/28/20 13:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-2
Matrix: Solid
Percent Solids: 78.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1
Pyrene	<0.042		0.042	0.0084	mg/Kg	☼	08/07/20 21:59	08/11/20 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*104*		*31 - 143*	*08/07/20 21:59*	*08/11/20 12:17*	*1*
2-Fluorobiphenyl	*96*		*43 - 145*	*08/07/20 21:59*	*08/11/20 12:17*	*1*
2-Fluorophenol	*80*		*31 - 166*	*08/07/20 21:59*	*08/11/20 12:17*	*1*
Nitrobenzene-d5	*76*		*37 - 147*	*08/07/20 21:59*	*08/11/20 12:17*	*1*
Phenol-d5	*66*		*30 - 153*	*08/07/20 21:59*	*08/11/20 12:17*	*1*
Terphenyl-d14	*103*		*42 - 157*	*08/07/20 21:59*	*08/11/20 12:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.56**	**J**	1.2	0.24	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Arsenic	**3.4**		0.62	0.21	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Barium	**82**		0.62	0.070	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Beryllium	**0.94**		0.25	0.058	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Boron	**4.4**		3.1	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Cadmium	**0.056**	**J**	0.12	0.022	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Calcium	**3500**	**B**	12	2.1	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Chromium	**20**		0.62	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Cobalt	**6.4**		0.31	0.081	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Copper	**32**		0.62	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Iron	**14000**	**B**	12	6.4	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Lead	**17**		0.31	0.14	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Magnesium	**3700**		6.2	3.1	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Manganese	**62**		0.62	0.090	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Nickel	**26**		0.62	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Potassium	**1000**		31	11	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Selenium	<0.62		0.62	0.36	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Silver	<0.31		0.31	0.080	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Sodium	**180**		62	9.1	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Vanadium	**31**		0.31	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	1
Zinc	**74**		1.2	0.54	mg/Kg	☼	08/05/20 18:14	08/06/20 15:14	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		08/08/20 05:41	08/09/20 23:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:41	08/09/20 23:04	1

Client Sample ID: 3481-1-B36

Date Collected: 07/28/20 13:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-2

Matrix: Solid
Percent Solids: 78.8

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		08/08/20 05:46	08/10/20 00:31	1
Barium	**0.33**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:31	1
Boron	**0.068**	**J**	0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:31	1
Calcium	**13**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:31	1
Chromium	**0.067**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:31	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:31	1
Iron	**41**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:31	1
Lead	**0.037**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:31	1
Manganese	**0.11**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:31	1
Nickel	**0.049**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:31	1
Potassium	**5.6**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:31	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:31	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:31	1
Zinc	**0.15**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 13:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:21	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		08/10/20 09:55	08/11/20 11:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.050**		0.020	0.0067	mg/Kg	☼	08/06/20 13:10	08/07/20 08:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.26		0.26	0.13	mg/Kg	☼	08/11/20 10:28	08/11/20 14:19	1
pH	**8.3**		0.2	0.2	SU			08/03/20 19:24	1

Client Sample ID: 3481-1-B36 Dup

Date Collected: 07/28/20 13:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-3

Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Acetone	<0.020		0.020	0.0088	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Chloromethane	<0.0050	*	0.0050	0.0020	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Methylene Chloride	**0.0027**	**J**	0.0050	0.0020	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	07/29/20 18:30	08/04/20 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*07/29/20 18:30*	*08/04/20 18:30*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/29/20 18:30*	*08/04/20 18:30*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*07/29/20 18:30*	*08/04/20 18:30*	*1*
Toluene-d8 (Surr)	*87*		*75 - 124*	*07/29/20 18:30*	*08/04/20 18:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1

Client Sample ID: 3481-1-B36 Dup
Date Collected: 07/28/20 13:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-3
Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Benzo[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B36 Dup

Date Collected: 07/28/20 13:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-3

Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Phenanthrene	<0.042		0.042	0.0058	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1
Pyrene	<0.042		0.042	0.0083	mg/Kg	☼	08/07/20 21:59	08/11/20 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*106*		*31 - 143*	*08/07/20 21:59*	*08/11/20 12:45*	*1*
2-Fluorobiphenyl	*95*		*43 - 145*	*08/07/20 21:59*	*08/11/20 12:45*	*1*
2-Fluorophenol	*85*		*31 - 166*	*08/07/20 21:59*	*08/11/20 12:45*	*1*
Nitrobenzene-d5	*76*		*37 - 147*	*08/07/20 21:59*	*08/11/20 12:45*	*1*
Phenol-d5	*72*		*30 - 153*	*08/07/20 21:59*	*08/11/20 12:45*	*1*
Terphenyl-d14	*101*		*42 - 157*	*08/07/20 21:59*	*08/11/20 12:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.47**	**J**	1.3	0.25	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Arsenic	**3.1**		0.63	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Barium	**58**		0.63	0.072	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Beryllium	**0.77**		0.25	0.059	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Boron	**6.1**		3.2	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Cadmium	**0.10**	**J**	0.13	0.023	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Calcium	**12000**	**B**	13	2.1	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Chromium	**17**		0.63	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Cobalt	**6.4**		0.32	0.083	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Copper	**24**		0.63	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Iron	**12000**	**B**	13	6.6	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Lead	**16**		0.32	0.15	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Magnesium	**8900**		6.3	3.1	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Manganese	**72**		0.63	0.092	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Nickel	**25**		0.63	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Potassium	**1300**		32	11	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Selenium	<0.63		0.63	0.37	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Silver	<0.32		0.32	0.081	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Sodium	**190**		63	9.3	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Thallium	<0.63		0.63	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Vanadium	**25**		0.32	0.074	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	1
Zinc	**69**		1.3	0.55	mg/Kg	☼	08/05/20 18:14	08/06/20 15:17	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		08/08/20 05:41	08/09/20 23:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:41	08/09/20 23:07	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B36 Dup

Date Collected: 07/28/20 13:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-3

Matrix: Solid
Percent Solids: 79.0

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		08/08/20 05:46	08/10/20 00:35	1
Barium	**0.26**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:35	1
Boron	**0.12**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:35	1
Calcium	**14**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:35	1
Chromium	**0.073**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:35	1
Cobalt	**0.015**	**J**	0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:35	1
Iron	**58**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:35	1
Lead	**0.047**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:35	1
Manganese	**0.14**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:35	1
Nickel	**0.066**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:35	1
Potassium	**8.6**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:35	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:35	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:35	1
Zinc	**0.21**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 13:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:24	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		08/10/20 09:55	08/11/20 11:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.079**		0.020	0.0068	mg/Kg	☼	08/06/20 13:10	08/07/20 08:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.35		0.35	0.17	mg/Kg	☼	08/11/20 10:28	08/11/20 14:35	1
pH	**7.9**		0.2	0.2	SU			08/03/20 19:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B35
Date Collected: 07/28/20 13:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-4
Matrix: Solid
Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Acetone	<0.021		0.021	0.0090	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Chloromethane	<0.0052	*	0.0052	0.0021	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Methylene Chloride	<0.0052		0.0052	0.0020	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Vinyl chloride	<0.0021		0.0021	0.00092	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	07/29/20 18:30	08/04/20 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 134*	*07/29/20 18:30*	*08/04/20 18:56*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/29/20 18:30*	*08/04/20 18:56*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*07/29/20 18:30*	*08/04/20 18:56*	*1*
Toluene-d8 (Surr)	*88*		*75 - 124*	*07/29/20 18:30*	*08/04/20 18:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1

Client Sample ID: 3481-1-B35
Date Collected: 07/28/20 13:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-4
Matrix: Solid
Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B35
Date Collected: 07/28/20 13:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-4
Matrix: Solid
Percent Solids: 79.8

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	<0.041		0.041	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Phenol	<0.21		0.21	0.092	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	08/07/20 21:59	08/11/20 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*109*		*31 - 143*	*08/07/20 21:59*	*08/11/20 13:12*	*1*
2-Fluorobiphenyl	*108*		*43 - 145*	*08/07/20 21:59*	*08/11/20 13:12*	*1*
2-Fluorophenol	*93*		*31 - 166*	*08/07/20 21:59*	*08/11/20 13:12*	*1*
Nitrobenzene-d5	*88*		*37 - 147*	*08/07/20 21:59*	*08/11/20 13:12*	*1*
Phenol-d5	*80*		*30 - 153*	*08/07/20 21:59*	*08/11/20 13:12*	*1*
Terphenyl-d14	*119*		*42 - 157*	*08/07/20 21:59*	*08/11/20 13:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.86**	**J**	1.2	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Arsenic	**6.8**		0.58	0.20	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Barium	**120**		0.58	0.066	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Beryllium	**0.93**		0.23	0.054	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Boron	**3.8**		2.9	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Cadmium	**0.21**		0.12	0.021	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Calcium	**3700**	**B**	12	2.0	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Chromium	**21**		0.58	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Cobalt	**14**		0.29	0.075	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Copper	**20**		0.58	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Iron	**17000**	**B**	12	6.0	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Lead	**16**		0.29	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Magnesium	**4200**		5.8	2.9	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Manganese	**400**		0.58	0.083	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Nickel	**28**		0.58	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Potassium	**1000**		29	10	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Sodium	**280**		58	8.5	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Vanadium	**37**		0.29	0.068	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	1
Zinc	**90**		1.2	0.51	mg/Kg	☼	08/05/20 18:14	08/06/20 15:21	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		08/08/20 05:41	08/09/20 23:10	1

Client Sample ID: 3481-1-B35

Date Collected: 07/28/20 13:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-4

Matrix: Solid
Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 00:39	1
Barium	**0.11**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:39	1
Boron	**0.091**	**J**	0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:39	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:39	1
Calcium	**6.1**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:39	1
Chromium	**0.016**	**J**	0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:39	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:39	1
Iron	**11**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:39	1
Manganese	**0.038**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:39	1
Nickel	**0.011**	**J**	0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:39	1
Potassium	**4.2**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:39	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:39	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:39	1
Zinc	**0.037**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:39	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		08/08/20 05:46	08/10/20 13:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00069**		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.039**		0.020	0.0067	mg/Kg	☼	08/06/20 13:10	08/07/20 08:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.32		0.32	0.16	mg/Kg	☼	08/11/20 10:28	08/11/20 14:37	1
pH	**7.7**		0.2	0.2	SU			08/03/20 19:29	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B10-1
Date Collected: 07/28/20 14:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-5
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	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Chloromethane	<0.0039	*	0.0039	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	07/29/20 18:30	08/04/20 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 134*	*07/29/20 18:30*	*08/04/20 19:21*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*07/29/20 18:30*	*08/04/20 19:21*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*07/29/20 18:30*	*08/04/20 19:21*	*1*
Toluene-d8 (Surr)	*86*		*75 - 124*	*07/29/20 18:30*	*08/04/20 19:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1

Client Sample ID: 3481-1-B10-1
Date Collected: 07/28/20 14:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-5
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	☼	08/07/20 21:59	08/11/20 13:39	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
4-Nitroaniline	<0.38	F1	0.38	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Di-n-octyl phthalate	**0.063**	**J**	0.19	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Fluoranthene	**0.0078**	**J**	0.038	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B10-1
Date Collected: 07/28/20 14:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-5
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	☼	08/07/20 21:59	08/11/20 13:39	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Phenanthrene	**0.0066**	**J**	0.038	0.0053	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1
Pyrene	**0.0098**	**J**	0.038	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*31 - 143*	*08/07/20 21:59*	*08/11/20 13:39*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*08/07/20 21:59*	*08/11/20 13:39*	*1*
2-Fluorophenol	*78*		*31 - 166*	*08/07/20 21:59*	*08/11/20 13:39*	*1*
Nitrobenzene-d5	*69*		*37 - 147*	*08/07/20 21:59*	*08/11/20 13:39*	*1*
Phenol-d5	*64*		*30 - 153*	*08/07/20 21:59*	*08/11/20 13:39*	*1*
Terphenyl-d14	*92*		*42 - 157*	*08/07/20 21:59*	*08/11/20 13:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.98**	**J**	1.1	0.21	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Arsenic	**8.4**		0.54	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Barium	**43**		0.54	0.062	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Beryllium	**0.76**		0.22	0.050	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Boron	**13**		2.7	0.25	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Cadmium	**0.063**	**J**	0.11	0.019	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Calcium	**63000**	**B**	110	18	mg/Kg	☼	08/05/20 18:14	08/07/20 00:32	10
Chromium	**18**		0.54	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Cobalt	**14**		0.27	0.071	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Copper	**20**		0.54	0.15	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Iron	**18000**	**B**	11	5.6	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Lead	**14**		0.27	0.12	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Magnesium	**26000**		5.4	2.7	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Manganese	**360**		0.54	0.078	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Nickel	**33**		0.54	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Potassium	**2600**		27	9.6	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Sodium	**890**		54	8.0	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Vanadium	**23**		0.27	0.064	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	1
Zinc	**51**		1.1	0.47	mg/Kg	☼	08/05/20 18:14	08/06/20 15:25	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		08/08/20 05:41	08/09/20 23:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:41	08/09/20 23:13	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:13	1
Iron	<0.40		0.40	0.20	mg/L		08/08/20 05:41	08/09/20 23:13	1

Client Sample ID: 3481-1-B10-1

Date Collected: 07/28/20 14:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-5

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		08/08/20 05:41	08/09/20 23:13	1
Manganese	**0.83**		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:13	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.091**		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 00:43	1
Barium	**0.43**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:43	1
Beryllium	**0.0064**		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:43	1
Boron	**0.20**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:43	1
Calcium	**35**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:43	1
Chromium	**0.14**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:43	1
Cobalt	**0.065**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:43	1
Iron	**170**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:43	1
Lead	**0.089**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:43	1
Manganese	**0.70**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:43	1
Nickel	**0.19**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:43	1
Potassium	**33**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:43	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:43	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:43	1
Zinc	**0.35**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:43	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		08/08/20 05:41	08/10/20 15:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 13:32	1
Thallium	**0.0044**		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00039**		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0080**	**J**	0.018	0.0060	mg/Kg	☼	08/06/20 13:10	08/07/20 08:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.31		0.31	0.15	mg/Kg	☼	08/11/20 10:28	08/11/20 14:38	1
pH	**8.4**		0.2	0.2	SU			08/03/20 19:31	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B10-2
Date Collected: 07/28/20 14:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-6
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Chloromethane	<0.0044	*	0.0044	0.0018	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 134*	*07/29/20 18:30*	*08/04/20 19:47*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/29/20 18:30*	*08/04/20 19:47*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*07/29/20 18:30*	*08/04/20 19:47*	*1*
Toluene-d8 (Surr)	*88*		*75 - 124*	*07/29/20 18:30*	*08/04/20 19:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B10-2
Date Collected: 07/28/20 14:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-6
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1

Client Sample ID: 3481-1-B10-2

Date Collected: 07/28/20 14:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-6

Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Phenanthrene	<0.040		0.040	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	08/07/20 21:59	08/11/20 10:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*31 - 143*	*08/07/20 21:59*	*08/11/20 10:01*	*1*
2-Fluorobiphenyl	*90*		*43 - 145*	*08/07/20 21:59*	*08/11/20 10:01*	*1*
2-Fluorophenol	*74*		*31 - 166*	*08/07/20 21:59*	*08/11/20 10:01*	*1*
Nitrobenzene-d5	*65*		*37 - 147*	*08/07/20 21:59*	*08/11/20 10:01*	*1*
Phenol-d5	*62*		*30 - 153*	*08/07/20 21:59*	*08/11/20 10:01*	*1*
Terphenyl-d14	*96*		*42 - 157*	*08/07/20 21:59*	*08/11/20 10:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**		1.1	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Arsenic	**7.1**		0.57	0.19	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Barium	**36**		0.57	0.065	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Beryllium	**0.73**		0.23	0.053	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Boron	**13**		2.8	0.26	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Cadmium	**0.052**	**J**	0.11	0.020	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Calcium	**69000**	**B**	110	19	mg/Kg	☼	08/05/20 18:14	08/07/20 00:36	10
Chromium	**18**		0.57	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Cobalt	**13**		0.28	0.074	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Copper	**19**		0.57	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Iron	**17000**	**B**	11	5.9	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Lead	**12**		0.28	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Magnesium	**29000**		5.7	2.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Manganese	**360**		0.57	0.082	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Nickel	**32**		0.57	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Potassium	**2800**		28	10	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Selenium	**0.46**	**J**	0.57	0.33	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Sodium	**820**		57	8.4	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Vanadium	**22**		0.28	0.067	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1
Zinc	**49**		1.1	0.50	mg/Kg	☼	08/05/20 18:14	08/06/20 15:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/08/20 05:41	08/09/20 23:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:41	08/09/20 23:16	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:16	1
Iron	<0.40		0.40	0.20	mg/L		08/08/20 05:41	08/09/20 23:16	1

Client Sample ID: 3481-1-B10-2

Date Collected: 07/28/20 14:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-6

Matrix: Solid
Percent Solids: 83.2

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		08/08/20 05:41	08/09/20 23:16	1
Manganese	**1.1**		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:16	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.11**		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 00:47	1
Barium	**0.35**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:47	1
Beryllium	**0.0070**		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:47	1
Boron	**0.19**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:47	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:47	1
Calcium	**35**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:47	1
Chromium	**0.16**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:47	1
Cobalt	**0.084**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:47	1
Iron	**210**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:47	1
Lead	**0.11**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:47	1
Manganese	**0.78**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:47	1
Nickel	**0.24**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:47	1
Potassium	**28**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:47	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:47	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:47	1
Zinc	**0.43**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:47	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		08/08/20 05:41	08/10/20 15:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 13:35	1
Thallium	**0.0038**		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:35	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		08/10/20 09:55	08/11/20 11:11	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	☼	08/06/20 13:10	08/07/20 08:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.35		0.35	0.18	mg/Kg	☼	08/11/20 10:28	08/11/20 14:40	1
pH	**8.0**		0.2	0.2	SU			08/03/20 19:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B10-3
Date Collected: 07/28/20 14:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-7
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	<0.0016		0.0016	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Acetone	**0.0087**	**J**	0.016	0.0068	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Chloromethane	<0.0039	*	0.0039	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Trichloroethene	<0.0016		0.0016	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	07/29/20 18:30	08/04/20 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 134*	*07/29/20 18:30*	*08/04/20 20:12*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*07/29/20 18:30*	*08/04/20 20:12*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*07/29/20 18:30*	*08/04/20 20:12*	*1*
Toluene-d8 (Surr)	*86*		*75 - 124*	*07/29/20 18:30*	*08/04/20 20:12*	*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	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1

Client Sample ID: 3481-1-B10-3
Date Collected: 07/28/20 14:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-7
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	☼	08/07/20 21:59	08/11/20 17:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Benzo[g,h,i]perylene	**0.017**	**J**	0.038	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Chrysene	**0.024**	**J**	0.038	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B10-3
Date Collected: 07/28/20 14:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-7
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	☼	08/07/20 21:59	08/11/20 17:42	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Phenanthrene	**0.030**	**J**	0.038	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1
Pyrene	**0.020**	**J**	0.038	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*31 - 143*	*08/07/20 21:59*	*08/11/20 17:42*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*08/07/20 21:59*	*08/11/20 17:42*	*1*
2-Fluorophenol	*76*		*31 - 166*	*08/07/20 21:59*	*08/11/20 17:42*	*1*
Nitrobenzene-d5	*70*		*37 - 147*	*08/07/20 21:59*	*08/11/20 17:42*	*1*
Phenol-d5	*63*		*30 - 153*	*08/07/20 21:59*	*08/11/20 17:42*	*1*
Terphenyl-d14	*95*		*42 - 157*	*08/07/20 21:59*	*08/11/20 17:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.93**	**J**	1.1	0.21	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Arsenic	**8.8**		0.55	0.19	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Barium	**21**		0.55	0.063	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Beryllium	**0.59**		0.22	0.051	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Boron	**10**		2.8	0.26	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Cadmium	**0.057**	**J**	0.11	0.020	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Calcium	**78000**	**B**	110	19	mg/Kg	☼	08/05/20 18:14	08/07/20 00:39	10
Chromium	**13**		0.55	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Cobalt	**13**		0.28	0.072	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Copper	**22**		0.55	0.15	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Iron	**21000**	**B**	110	57	mg/Kg	☼	08/05/20 18:14	08/07/20 00:39	10
Lead	**14**		0.28	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Magnesium	**41000**		55	27	mg/Kg	☼	08/05/20 18:14	08/07/20 00:39	10
Manganese	**360**		0.55	0.080	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Nickel	**28**		0.55	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Potassium	**2000**		28	9.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Selenium	**0.38**	**J**	0.55	0.32	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Silver	<0.28		0.28	0.071	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Sodium	**210**		55	8.2	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Thallium	**0.30**	**J**	0.55	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Vanadium	**16**		0.28	0.065	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1
Zinc	**40**		1.1	0.48	mg/Kg	☼	08/05/20 18:14	08/06/20 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 00:51	1
Barium	<0.50		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:51	1
Boron	**0.12**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:51	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B10-3
Date Collected: 07/28/20 14:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-7
Matrix: Solid
Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:51	1
Calcium	**24**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:51	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:51	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:51	1
Iron	<0.40		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:51	1
Manganese	**0.041**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:51	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:51	1
Potassium	**1.4**	**J**	2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:51	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:51	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:51	1
Zinc	<0.50		0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:51	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		08/08/20 05:46	08/10/20 13:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00028**		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0061	mg/Kg	☼	08/06/20 13:10	08/07/20 08:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.32		0.32	0.16	mg/Kg	☼	08/11/20 10:28	08/11/20 14:42	1
pH	**7.9**		0.2	0.2	SU			08/03/20 19:36	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-1
Date Collected: 07/28/20 14:20
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-8
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	<0.0018		0.0018	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Chloromethane	<0.0044	*	0.0044	0.0018	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 134*	*07/29/20 18:30*	*08/04/20 20:37*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*07/29/20 18:30*	*08/04/20 20:37*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*07/29/20 18:30*	*08/04/20 20:37*	*1*
Toluene-d8 (Surr)	*86*		*75 - 124*	*07/29/20 18:30*	*08/04/20 20:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1

Client Sample ID: 3481-1-B09-1
Date Collected: 07/28/20 14:20
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-8
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	0.090	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-1
Date Collected: 07/28/20 14:20
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-8
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	☼	08/07/20 21:59	08/11/20 14:33	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*31 - 143*	*08/07/20 21:59*	*08/11/20 14:33*	*1*
2-Fluorobiphenyl	*94*		*43 - 145*	*08/07/20 21:59*	*08/11/20 14:33*	*1*
2-Fluorophenol	*84*		*31 - 166*	*08/07/20 21:59*	*08/11/20 14:33*	*1*
Nitrobenzene-d5	*73*		*37 - 147*	*08/07/20 21:59*	*08/11/20 14:33*	*1*
Phenol-d5	*69*		*30 - 153*	*08/07/20 21:59*	*08/11/20 14:33*	*1*
Terphenyl-d14	*100*		*42 - 157*	*08/07/20 21:59*	*08/11/20 14:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.92**	**J**	1.1	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Arsenic	**8.6**		0.56	0.19	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Barium	**110**		0.56	0.063	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Beryllium	**0.78**		0.22	0.052	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Boron	**3.5**		2.8	0.26	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Cadmium	**0.058**	**J**	0.11	0.020	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Calcium	**8700**	**B**	11	1.9	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Chromium	**16**		0.56	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Cobalt	**12**		0.28	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Copper	**17**		0.56	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Iron	**17000**	**B**	11	5.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Lead	**16**		0.28	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Magnesium	**6700**		5.6	2.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Manganese	**480**		0.56	0.081	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Nickel	**26**		0.56	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Potassium	**880**		28	9.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Sodium	**280**		56	8.2	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Vanadium	**28**		0.28	0.066	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	1
Zinc	**65**		1.1	0.49	mg/Kg	☼	08/05/20 18:14	08/06/20 15:37	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		08/08/20 05:41	08/09/20 23:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:41	08/09/20 23:23	1

Client Sample ID: 3481-1-B09-1

Date Collected: 07/28/20 14:20
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-8

Matrix: Solid
Percent Solids: 84.2

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		08/08/20 05:46	08/10/20 00:55	1
Barium	**0.20**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:55	1
Boron	**0.14**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:55	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:55	1
Calcium	**8.0**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:55	1
Chromium	**0.038**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:55	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:55	1
Iron	**36**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:55	1
Lead	**0.017**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:55	1
Manganese	**0.12**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:55	1
Nickel	**0.027**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:55	1
Potassium	**4.3**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:55	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:55	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:55	1
Zinc	**0.14**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:55	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		08/08/20 05:46	08/10/20 13:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:43	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		08/10/20 09:55	08/11/20 11:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.053**		0.018	0.0061	mg/Kg	☼	08/06/20 13:10	08/07/20 08:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.28		0.28	0.14	mg/Kg	☼	08/11/20 10:28	08/11/20 14:43	1
pH	**8.0**		0.2	0.2	SU			08/03/20 19:39	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-2
Date Collected: 07/28/20 14:25
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-9
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Chloromethane	<0.0040	*	0.0040	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 134*	*07/29/20 18:30*	*08/04/20 21:03*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*	*07/29/20 18:30*	*08/04/20 21:03*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*07/29/20 18:30*	*08/04/20 21:03*	*1*
Toluene-d8 (Surr)	*89*		*75 - 124*	*07/29/20 18:30*	*08/04/20 21:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1

Client Sample ID: 3481-1-B09-2
Date Collected: 07/28/20 14:25
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-9
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2,4-Dinitrophenol	<0.80		0.80	0.69	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Anthracene	**0.0099**	**J**	0.039	0.0066	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Benzo[a]anthracene	**0.011**	**J**	0.039	0.0053	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Benzo[a]pyrene	**0.0098**	**J**	0.039	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Benzo[g,h,i]perylene	**0.018**	**J**	0.039	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Chrysene	**0.026**	**J**	0.039	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Fluoranthene	**0.036**	**J**	0.039	0.0073	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-2
Date Collected: 07/28/20 14:25
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-9
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Phenanthrene	**0.040**		0.039	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1
Pyrene	**0.038**	**J**	0.039	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*31 - 143*	*08/07/20 21:59*	*08/11/20 18:09*	*1*
2-Fluorobiphenyl	*96*		*43 - 145*	*08/07/20 21:59*	*08/11/20 18:09*	*1*
2-Fluorophenol	*82*		*31 - 166*	*08/07/20 21:59*	*08/11/20 18:09*	*1*
Nitrobenzene-d5	*70*		*37 - 147*	*08/07/20 21:59*	*08/11/20 18:09*	*1*
Phenol-d5	*68*		*30 - 153*	*08/07/20 21:59*	*08/11/20 18:09*	*1*
Terphenyl-d14	*97*		*42 - 157*	*08/07/20 21:59*	*08/11/20 18:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.63**	**J**	1.1	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Arsenic	**7.7**		0.55	0.19	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Barium	**21**		0.55	0.063	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Beryllium	**0.35**		0.22	0.052	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Boron	**6.6**		2.8	0.26	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Cadmium	**0.16**		0.11	0.020	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Calcium	**78000**	**B**	110	19	mg/Kg	☼	08/05/20 18:14	08/07/20 00:44	10
Chromium	**6.8**		0.55	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Cobalt	**5.2**		0.28	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Copper	**15**		0.55	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Iron	**16000**	**B**	110	58	mg/Kg	☼	08/05/20 18:14	08/07/20 00:44	10
Lead	**9.2**		0.28	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Magnesium	**45000**		55	27	mg/Kg	☼	08/05/20 18:14	08/07/20 00:44	10
Manganese	**270**		0.55	0.080	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Nickel	**13**		0.55	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Potassium	**820**		28	9.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Selenium	<0.55		0.55	0.33	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Sodium	**160**		55	8.2	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Vanadium	**11**		0.28	0.065	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	1
Zinc	**59**		1.1	0.49	mg/Kg	☼	08/05/20 18:14	08/06/20 15:41	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		08/08/20 05:41	08/09/20 23:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:41	08/09/20 23:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-2
Date Collected: 07/28/20 14:25
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-9
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 00:59	1
Barium	**0.086**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 00:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 00:59	1
Boron	**0.15**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 00:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 00:59	1
Calcium	**13**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:59	1
Chromium	**0.032**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:59	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:59	1
Iron	**22**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 00:59	1
Lead	**0.011**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 00:59	1
Manganese	**0.15**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:59	1
Nickel	**0.028**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:59	1
Potassium	**10**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 00:59	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 00:59	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 00:59	1
Zinc	**0.068**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 00:59	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		08/08/20 05:46	08/10/20 13:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:53	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		08/10/20 09:55	08/11/20 11:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0092**	**J**	0.019	0.0062	mg/Kg	☼	08/06/20 13:10	08/07/20 08:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.34		0.34	0.17	mg/Kg	☼	08/11/20 10:28	08/11/20 14:45	1
pH	**8.3**		0.2	0.2	SU			08/03/20 19:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-3
Date Collected: 07/28/20 14:30
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-10
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	☼	07/29/20 18:30	08/04/20 21:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Chloromethane	<0.0040	*	0.0040	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 134*	*07/29/20 18:30*	*08/04/20 21:28*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*07/29/20 18:30*	*08/04/20 21:28*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*07/29/20 18:30*	*08/04/20 21:28*	*1*
Toluene-d8 (Surr)	*89*		*75 - 124*	*07/29/20 18:30*	*08/04/20 21:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1

Client Sample ID: 3481-1-B09-3
Date Collected: 07/28/20 14:30
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-10
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	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Chrysene	**0.023**	**J**	0.039	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-3
Date Collected: 07/28/20 14:30
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-10
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	☼	08/07/20 21:59	08/11/20 18:36	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Phenanthrene	**0.025**	**J**	0.039	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1
Pyrene	**0.015**	**J**	0.039	0.0079	mg/Kg	☼	08/07/20 21:59	08/11/20 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*31 - 143*	*08/07/20 21:59*	*08/11/20 18:36*	*1*
2-Fluorobiphenyl	*99*		*43 - 145*	*08/07/20 21:59*	*08/11/20 18:36*	*1*
2-Fluorophenol	*82*		*31 - 166*	*08/07/20 21:59*	*08/11/20 18:36*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*08/07/20 21:59*	*08/11/20 18:36*	*1*
Phenol-d5	*69*		*30 - 153*	*08/07/20 21:59*	*08/11/20 18:36*	*1*
Terphenyl-d14	*102*		*42 - 157*	*08/07/20 21:59*	*08/11/20 18:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**		1.1	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Arsenic	**7.6**		0.57	0.20	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Barium	**36**		0.57	0.065	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Beryllium	**0.85**		0.23	0.054	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Boron	**14**		2.9	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Cadmium	**0.054**	**J**	0.11	0.021	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Calcium	**63000**	**B**	110	19	mg/Kg	☼	08/05/20 18:14	08/07/20 00:48	10
Chromium	**20**		0.57	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Cobalt	**14**		0.29	0.075	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Copper	**20**		0.57	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Iron	**18000**	**B**	11	6.0	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Lead	**14**		0.29	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Magnesium	**24000**		5.7	2.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Manganese	**320**		0.57	0.083	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Nickel	**36**		0.57	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Potassium	**3200**		29	10	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Sodium	**180**		57	8.5	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Vanadium	**21**		0.29	0.068	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1
Zinc	**53**		1.1	0.50	mg/Kg	☼	08/05/20 18:14	08/06/20 15:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 01:03	1
Barium	<0.50		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:03	1
Boron	**0.13**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B09-3
Date Collected: 07/28/20 14:30
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-10
Matrix: Solid
Percent Solids: 83.6

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		08/08/20 05:46	08/10/20 01:03	1
Calcium	**18**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:03	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:03	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:03	1
Iron	**0.27**	**J**	0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:03	1
Manganese	**0.031**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:03	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:03	1
Potassium	**1.4**	**J**	2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:03	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:03	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:03	1
Zinc	<0.50		0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 13:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 13:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.020	0.0066	mg/Kg	☼	08/06/20 13:10	08/07/20 08:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.32		0.32	0.16	mg/Kg	☼	08/11/20 10:28	08/11/20 14:47	1
pH	**7.7**		0.2	0.2	SU			08/03/20 19:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-1
Date Collected: 07/28/20 14:35
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-11
Matrix: Solid
Percent Solids: 85.9

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	0.00058	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Chloromethane	<0.0043	*	0.0043	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	07/29/20 18:30	08/04/20 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*07/29/20 18:30*	*08/04/20 21:53*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/29/20 18:30*	*08/04/20 21:53*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*07/29/20 18:30*	*08/04/20 21:53*	*1*
Toluene-d8 (Surr)	*87*		*75 - 124*	*07/29/20 18:30*	*08/04/20 21:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1

Client Sample ID: 3481-1-B07-1
Date Collected: 07/28/20 14:35
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-11
Matrix: Solid
Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-1
Date Collected: 07/28/20 14:35
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-11
Matrix: Solid
Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*31 - 143*	*08/07/20 21:59*	*08/11/20 15:00*	*1*
2-Fluorobiphenyl	*92*		*43 - 145*	*08/07/20 21:59*	*08/11/20 15:00*	*1*
2-Fluorophenol	*78*		*31 - 166*	*08/07/20 21:59*	*08/11/20 15:00*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*08/07/20 21:59*	*08/11/20 15:00*	*1*
Phenol-d5	*66*		*30 - 153*	*08/07/20 21:59*	*08/11/20 15:00*	*1*
Terphenyl-d14	*94*		*42 - 157*	*08/07/20 21:59*	*08/11/20 15:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.87**	**J**	1.1	0.21	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Arsenic	**8.0**		0.54	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Barium	**110**		0.54	0.061	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Beryllium	**0.63**		0.21	0.050	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Boron	**5.6**		2.7	0.25	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Cadmium	**0.15**		0.11	0.019	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Calcium	**28000**	**B**	11	1.8	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Chromium	**14**		0.54	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Cobalt	**12**		0.27	0.070	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Copper	**13**		0.54	0.15	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Iron	**15000**	**B**	11	5.6	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Lead	**13**		0.27	0.12	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Magnesium	**19000**		5.4	2.7	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Manganese	**680**		0.54	0.078	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Nickel	**22**		0.54	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Potassium	**960**		27	9.5	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Sodium	**180**		54	8.0	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Vanadium	**28**		0.27	0.063	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	1
Zinc	**52**		1.1	0.47	mg/Kg	☼	08/05/20 18:14	08/06/20 15:57	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		08/08/20 05:41	08/09/20 23:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:41	08/09/20 23:32	1

Client Sample ID: 3481-1-B07-1

Date Collected: 07/28/20 14:35
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-11

Matrix: Solid
Percent Solids: 85.9

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		08/08/20 05:46	08/10/20 01:07	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:07	1
Boron	**0.15**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 01:07	1
Calcium	**9.4**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:07	1
Chromium	**0.033**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:07	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:07	1
Iron	**30**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:07	1
Lead	**0.013**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:07	1
Manganese	**0.11**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:07	1
Nickel	**0.021**	**J**	0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:07	1
Potassium	**3.9**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:07	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:07	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:07	1
Zinc	**0.096**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 14:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:01	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		08/10/20 09:55	08/11/20 11:31	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	☼	08/06/20 13:10	08/07/20 08:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.27		0.27	0.14	mg/Kg	☼	08/11/20 10:28	08/11/20 14:48	1
pH	**8.1**		0.2	0.2	SU			08/03/20 19:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-2
Date Collected: 07/28/20 14:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-13
Matrix: Solid
Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Acetone	**0.033**		0.019	0.0081	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Carbon disulfide	<0.0046	*1	0.0046	0.00097	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Chloroethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Methylene Chloride	**0.0024**	**J B**	0.0046	0.0018	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	07/29/20 18:30	08/05/20 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*07/29/20 18:30*	*08/05/20 17:58*	*1*
4-Bromofluorobenzene (Surr)	*84*		*75 - 131*	*07/29/20 18:30*	*08/05/20 17:58*	*1*
Dibromofluoromethane	*116*		*75 - 126*	*07/29/20 18:30*	*08/05/20 17:58*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*07/29/20 18:30*	*08/05/20 17:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1

Client Sample ID: 3481-1-B07-2
Date Collected: 07/28/20 14:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-13
Matrix: Solid
Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2-Methylnaphthalene	**0.049**	**J**	0.077	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-2
Date Collected: 07/28/20 14:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-13
Matrix: Solid
Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Phenanthrene	**0.017**	**J**	0.038	0.0053	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1
Pyrene	**0.0079**	**J**	0.038	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*31 - 143*	*08/07/20 21:59*	*08/11/20 15:27*	*1*
2-Fluorobiphenyl	*99*		*43 - 145*	*08/07/20 21:59*	*08/11/20 15:27*	*1*
2-Fluorophenol	*89*		*31 - 166*	*08/07/20 21:59*	*08/11/20 15:27*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*08/07/20 21:59*	*08/11/20 15:27*	*1*
Phenol-d5	*77*		*30 - 153*	*08/07/20 21:59*	*08/11/20 15:27*	*1*
Terphenyl-d14	*106*		*42 - 157*	*08/07/20 21:59*	*08/11/20 15:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.85**	**J**	1.1	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Arsenic	**4.9**		0.56	0.19	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Barium	**15**		0.56	0.064	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Beryllium	**0.36**		0.22	0.052	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Boron	**7.8**		2.8	0.26	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Cadmium	**0.16**		0.11	0.020	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Calcium	**110000**	**B**	110	19	mg/Kg	☼	08/05/20 18:14	08/07/20 00:59	10
Chromium	**6.3**		0.56	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Cobalt	**4.2**		0.28	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Copper	**13**		0.56	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Iron	**13000**	**B**	110	58	mg/Kg	☼	08/05/20 18:14	08/07/20 00:59	10
Lead	**8.3**		0.28	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Magnesium	**65000**		56	28	mg/Kg	☼	08/05/20 18:14	08/07/20 00:59	10
Manganese	**240**		0.56	0.081	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Nickel	**13**		0.56	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Potassium	**860**		28	9.9	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Sodium	**190**		56	8.3	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Vanadium	**10**		0.28	0.066	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	1
Zinc	**42**		1.1	0.49	mg/Kg	☼	08/05/20 18:14	08/06/20 16:01	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		08/08/20 05:46	08/10/20 01:19	1
Barium	<0.50		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:19	1
Boron	**0.14**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-2
Date Collected: 07/28/20 14:40
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-13
Matrix: Solid
Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 01:19	1
Calcium	**8.6**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:19	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:19	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:19	1
Iron	**3.6**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:19	1
Manganese	**0.019**	**J**	0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:19	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:19	1
Potassium	**1.8**	**J**	2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:19	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:19	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:19	1
Zinc	**0.027**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 14:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:04	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		08/10/20 09:55	08/11/20 11:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0086**	**J**	0.018	0.0059	mg/Kg	☼	08/06/20 13:10	08/07/20 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.26		0.26	0.13	mg/Kg	☼	08/11/20 10:28	08/11/20 14:50	1
pH	**8.5**		0.2	0.2	SU			08/03/20 19:51	1

Client Sample ID: 3481-1-B07-2 Dup

Date Collected: 07/28/20 14:45
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-14

Matrix: Solid
Percent Solids: 75.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0025		0.0025	0.00085	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00081	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
1,1-Dichloroethane	<0.0025		0.0025	0.00087	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
1,1-Dichloroethene	<0.0025		0.0025	0.00087	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
1,2-Dichloroethane	<0.0063		0.0063	0.0020	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
1,2-Dichloropropane	<0.0025		0.0025	0.00066	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
1,3-Dichloropropene, Total	<0.0025		0.0025	0.00089	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
2-Butanone (MEK)	<0.0063		0.0063	0.0028	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
2-Hexanone	<0.0063		0.0063	0.0020	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
4-Methyl-2-pentanone (MIBK)	<0.0063		0.0063	0.0019	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Acetone	<0.025		0.025	0.011	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Benzene	<0.0025		0.0025	0.00065	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Bromodichloromethane	<0.0025		0.0025	0.00052	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Bromoform	<0.0025		0.0025	0.00074	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Bromomethane	<0.0063		0.0063	0.0024	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Carbon disulfide	<0.0063	*1	0.0063	0.0013	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Carbon tetrachloride	<0.0025		0.0025	0.00074	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Chlorobenzene	<0.0025		0.0025	0.00094	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Chloroethane	<0.0063	*	0.0063	0.0019	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Chloroform	<0.0025		0.0025	0.00088	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Chloromethane	<0.0063		0.0063	0.0026	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00071	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00077	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Dibromochloromethane	<0.0025		0.0025	0.00083	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00074	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Methylene Chloride	<0.0063		0.0063	0.0025	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Styrene	<0.0025		0.0025	0.00077	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Tetrachloroethene	<0.0025		0.0025	0.00086	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Toluene	<0.0025		0.0025	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00089	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Trichloroethene	<0.0025		0.0025	0.00086	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1
Xylenes, Total	<0.0051		0.0051	0.00081	mg/Kg	☼	07/29/20 18:30	08/05/20 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 134*	*07/29/20 18:30*	*08/05/20 18:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 131*	*07/29/20 18:30*	*08/05/20 18:23*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*07/29/20 18:30*	*08/05/20 18:23*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/29/20 18:30*	*08/05/20 18:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.22		0.22	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
1,4-Dichlorobenzene	<0.22		0.22	0.056	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1

Client Sample ID: 3481-1-B07-2 Dup
Date Collected: 07/28/20 14:45
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-14
Matrix: Solid
Percent Solids: 75.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.44		0.44	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2,4,6-Trichlorophenol	<0.44		0.44	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2,4-Dichlorophenol	<0.44		0.44	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2,4-Dimethylphenol	<0.44		0.44	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2,4-Dinitrophenol	<0.88		0.88	0.77	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2,4-Dinitrotoluene	<0.22		0.22	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2,6-Dinitrotoluene	<0.22		0.22	0.086	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2-Chlorophenol	<0.22		0.22	0.075	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2-Methylnaphthalene	**0.0081**	**J**	0.088	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2-Methylphenol	<0.22		0.22	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2-Nitroaniline	<0.22		0.22	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
2-Nitrophenol	<0.44		0.44	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
3 & 4 Methylphenol	<0.22		0.22	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
3-Nitroaniline	<0.44		0.44	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
4,6-Dinitro-2-methylphenol	<0.88		0.88	0.35	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
4-Chloro-3-methylphenol	<0.44		0.44	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
4-Chloroaniline	<0.88		0.88	0.21	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
4-Nitroaniline	<0.44		0.44	0.18	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
4-Nitrophenol	<0.88		0.88	0.42	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Acenaphthene	<0.044		0.044	0.0079	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Acenaphthylene	<0.044		0.044	0.0058	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Anthracene	**0.0078**	**J**	0.044	0.0073	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Benzo[a]anthracene	<0.044		0.044	0.0059	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Benzo[a]pyrene	<0.044		0.044	0.0085	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Benzo[b]fluoranthene	<0.044		0.044	0.0095	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.044	0.014	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Benzo[k]fluoranthene	<0.044		0.044	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.080	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Butyl benzyl phthalate	<0.22		0.22	0.083	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Chrysene	<0.044		0.044	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Dibenz(a,h)anthracene	<0.044		0.044	0.0085	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Diethyl phthalate	<0.22		0.22	0.074	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Dimethyl phthalate	<0.22		0.22	0.057	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Di-n-butyl phthalate	<0.22		0.22	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Di-n-octyl phthalate	<0.22		0.22	0.072	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Fluoranthene	<0.044		0.044	0.0081	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Fluorene	<0.044		0.044	0.0062	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Hexachlorobenzene	<0.088		0.088	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Hexachlorobutadiene	<0.22		0.22	0.069	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Hexachlorocyclopentadiene	<0.88		0.88	0.25	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Hexachloroethane	<0.22		0.22	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-2 Dup

Date Collected: 07/28/20 14:45
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-14

Matrix: Solid
Percent Solids: 75.2

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	<0.044		0.044	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Isophorone	<0.22		0.22	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Naphthalene	<0.044		0.044	0.0067	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Nitrobenzene	<0.044		0.044	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
N-Nitrosodi-n-propylamine	<0.088		0.088	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
N-Nitrosodiphenylamine	<0.22		0.22	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Pentachlorophenol	<0.88		0.88	0.70	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Phenanthrene	**0.070**		0.044	0.0061	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Phenol	<0.22		0.22	0.097	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1
Pyrene	**0.027**	**J**	0.044	0.0087	mg/Kg	☼	08/07/20 21:59	08/11/20 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*65*		*31 - 143*	*08/07/20 21:59*	*08/11/20 19:03*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*08/07/20 21:59*	*08/11/20 19:03*	*1*
2-Fluorophenol	*69*		*31 - 166*	*08/07/20 21:59*	*08/11/20 19:03*	*1*
Nitrobenzene-d5	*61*		*37 - 147*	*08/07/20 21:59*	*08/11/20 19:03*	*1*
Phenol-d5	*59*		*30 - 153*	*08/07/20 21:59*	*08/11/20 19:03*	*1*
Terphenyl-d14	*91*		*42 - 157*	*08/07/20 21:59*	*08/11/20 19:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**	**J**	1.3	0.24	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Arsenic	**10**		0.63	0.21	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Barium	**34**		0.63	0.072	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Beryllium	**0.94**		0.25	0.059	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Boron	**16**		3.1	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Cadmium	**0.25**		0.13	0.023	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Calcium	**62000**	**B**	130	21	mg/Kg	☼	08/05/20 18:14	08/07/20 01:03	10
Chromium	**20**		0.63	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Cobalt	**14**		0.31	0.082	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Copper	**23**		0.63	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Iron	**22000**	**B**	13	6.5	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Lead	**14**		0.31	0.15	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Magnesium	**28000**		6.3	3.1	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Manganese	**320**		0.63	0.091	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Nickel	**36**		0.63	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Potassium	**3500**		31	11	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Selenium	<0.63		0.63	0.37	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Silver	<0.31		0.31	0.081	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Sodium	**280**		63	9.3	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Thallium	<0.63		0.63	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Vanadium	**22**		0.31	0.074	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1
Zinc	**63**		1.3	0.55	mg/Kg	☼	08/05/20 18:14	08/06/20 16:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 01:23	1
Barium	<0.50		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:23	1
Boron	**0.13**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:23	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-2 Dup
Date Collected: 07/28/20 14:45
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-14
Matrix: Solid
Percent Solids: 75.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 01:23	1
Calcium	**13**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:23	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:23	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:23	1
Iron	**2.2**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:23	1
Manganese	**0.034**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:23	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:23	1
Potassium	**2.7**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:23	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:23	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:23	1
Zinc	**0.050**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 14:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J**	0.021	0.0071	mg/Kg	☼	08/06/20 13:10	08/07/20 08:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.30		0.30	0.15	mg/Kg	☼	08/11/20 10:28	08/11/20 14:55	1
pH	**8.4**		0.2	0.2	SU			08/03/20 19:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-3
Date Collected: 07/28/20 14:50
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-15
Matrix: Solid
Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Carbon disulfide	<0.0037	*1	0.0037	0.00077	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	07/29/20 18:30	08/05/20 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 134*	*07/29/20 18:30*	*08/05/20 18:48*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*	*07/29/20 18:30*	*08/05/20 18:48*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*07/29/20 18:30*	*08/05/20 18:48*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*07/29/20 18:30*	*08/05/20 18:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-3
Date Collected: 07/28/20 14:50
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-15
Matrix: Solid
Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Benzo[a]anthracene	**0.0050**	**J**	0.036	0.0049	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-3
Date Collected: 07/28/20 14:50
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-15
Matrix: Solid
Percent Solids: 90.5

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	<0.036		0.036	0.0094	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Phenanthrene	**0.0096**	**J**	0.036	0.0050	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	08/07/20 21:59	08/11/20 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*31 - 143*	*08/07/20 21:59*	*08/11/20 15:54*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*08/07/20 21:59*	*08/11/20 15:54*	*1*
2-Fluorophenol	*74*		*31 - 166*	*08/07/20 21:59*	*08/11/20 15:54*	*1*
Nitrobenzene-d5	*63*		*37 - 147*	*08/07/20 21:59*	*08/11/20 15:54*	*1*
Phenol-d5	*65*		*30 - 153*	*08/07/20 21:59*	*08/11/20 15:54*	*1*
Terphenyl-d14	*98*		*42 - 157*	*08/07/20 21:59*	*08/11/20 15:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.81**	**J**	1.0	0.20	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Arsenic	**5.0**		0.51	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Barium	**10**		0.51	0.059	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Beryllium	**0.34**		0.21	0.048	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Boron	**9.0**		2.6	0.24	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Cadmium	**0.13**		0.10	0.019	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Calcium	**160000**	**B**	100	17	mg/Kg	☼	08/05/20 18:14	08/07/20 01:07	10
Chromium	**6.2**		0.51	0.25	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Cobalt	**6.1**		0.26	0.067	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Copper	**13**		0.51	0.14	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Iron	**14000**	**B**	100	54	mg/Kg	☼	08/05/20 18:14	08/07/20 01:07	10
Lead	**12**		0.26	0.12	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Magnesium	**89000**		51	26	mg/Kg	☼	08/05/20 18:14	08/07/20 01:07	10
Manganese	**270**		0.51	0.075	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Nickel	**14**		0.51	0.15	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Potassium	**1200**		26	9.1	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Selenium	<0.51		0.51	0.30	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Silver	<0.26		0.26	0.066	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Sodium	**220**		51	7.6	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Thallium	<0.51		0.51	0.26	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Vanadium	**9.8**		0.26	0.061	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1
Zinc	**34**		1.0	0.45	mg/Kg	☼	08/05/20 18:14	08/06/20 16:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 01:27	1
Barium	<0.50		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:27	1
Boron	**0.13**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B07-3
Date Collected: 07/28/20 14:50
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-15
Matrix: Solid
Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 01:27	1
Calcium	**16**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:27	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:27	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:27	1
Iron	<0.40		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:27	1
Manganese	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:27	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:27	1
Potassium	**0.73**	**J**	2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:27	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:27	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:27	1
Zinc	**0.022**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:27	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		08/08/20 05:46	08/10/20 14:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg	☼	08/06/20 13:10	08/07/20 08:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.30		0.30	0.15	mg/Kg	☼	08/11/20 10:28	08/11/20 14:57	1
pH	**8.0**		0.2	0.2	SU			08/03/20 19:56	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B06-1
Date Collected: 07/28/20 15:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-16
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Acetone	**0.0089**	**J**	0.017	0.0072	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Carbon disulfide	<0.0042	*1	0.0042	0.00086	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	07/29/20 18:30	08/05/20 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*07/29/20 18:30*	*08/05/20 19:13*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*07/29/20 18:30*	*08/05/20 19:13*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*07/29/20 18:30*	*08/05/20 19:13*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*07/29/20 18:30*	*08/05/20 19:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1

Client Sample ID: 3481-1-B06-1
Date Collected: 07/28/20 15:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-16
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B06-1
Date Collected: 07/28/20 15:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-16
Matrix: Solid
Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	08/07/20 21:59	08/11/20 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*31 - 143*	*08/07/20 21:59*	*08/11/20 16:21*	*1*
2-Fluorobiphenyl	*78*		*43 - 145*	*08/07/20 21:59*	*08/11/20 16:21*	*1*
2-Fluorophenol	*71*		*31 - 166*	*08/07/20 21:59*	*08/11/20 16:21*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*08/07/20 21:59*	*08/11/20 16:21*	*1*
Phenol-d5	*59*		*30 - 153*	*08/07/20 21:59*	*08/11/20 16:21*	*1*
Terphenyl-d14	*92*		*42 - 157*	*08/07/20 21:59*	*08/11/20 16:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**		1.2	0.23	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Arsenic	**8.6**		0.59	0.20	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Barium	**88**		0.59	0.067	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Beryllium	**0.98**		0.23	0.055	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Boron	**15**		2.9	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Cadmium	**0.20**		0.12	0.021	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Calcium	**28000**	**B**	12	2.0	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Chromium	**23**		0.59	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Cobalt	**13**		0.29	0.077	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Copper	**20**		0.59	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Iron	**21000**	**B**	12	6.1	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Lead	**13**		0.29	0.14	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Magnesium	**21000**		5.9	2.9	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Manganese	**540**		0.59	0.085	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Nickel	**40**		0.59	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Potassium	**3000**		29	10	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Selenium	**0.35**	**J**	0.59	0.35	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Silver	<0.29		0.29	0.076	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Sodium	**790**		59	8.7	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Vanadium	**30**		0.29	0.069	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	1
Zinc	**67**		1.2	0.52	mg/Kg	☼	08/05/20 18:14	08/06/20 16:13	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		08/08/20 05:41	08/09/20 23:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:41	08/09/20 23:50	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:50	1
Iron	<0.40		0.40	0.20	mg/L		08/08/20 05:41	08/09/20 23:50	1

Client Sample ID: 3481-1-B06-1

Date Collected: 07/28/20 15:00
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-16

Matrix: Solid
Percent Solids: 82.6

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		08/08/20 05:41	08/09/20 23:50	1
Manganese	**0.47**		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:50	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.067**		0.050	0.010	mg/L		08/08/20 05:46	08/10/20 01:31	1
Barium	**0.68**		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:31	1
Beryllium	**0.0066**		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:31	1
Boron	**0.25**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 01:31	1
Calcium	**46**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:31	1
Chromium	**0.16**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:31	1
Cobalt	**0.043**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:31	1
Iron	**150**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:31	1
Lead	**0.067**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:31	1
Manganese	**0.61**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:31	1
Nickel	**0.18**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:31	1
Potassium	**27**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:31	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:31	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:31	1
Zinc	**0.39**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:41	08/10/20 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 14:15	1
Thallium	**0.0031**		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:39	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	☼	08/06/20 13:10	08/07/20 08:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.36		0.36	0.18	mg/Kg	☼	08/11/20 10:28	08/11/20 14:59	1
pH	**8.7**		0.2	0.2	SU			08/03/20 19:58	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B06-2
Date Collected: 07/28/20 15:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-17
Matrix: Solid
Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
1,1-Dichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Acetone	<0.020		0.020	0.0085	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Chloromethane	<0.0049	*	0.0049	0.0020	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00057	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Toluene	<0.0020		0.0020	0.00049	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	07/29/20 18:30	08/05/20 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 134*	*07/29/20 18:30*	*08/05/20 14:15*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*07/29/20 18:30*	*08/05/20 14:15*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*07/29/20 18:30*	*08/05/20 14:15*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*07/29/20 18:30*	*08/05/20 14:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1

Client Sample ID: 3481-1-B06-2
Date Collected: 07/28/20 15:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-17
Matrix: Solid
Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Chrysene	**0.013**	**J**	0.040	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B06-2
Date Collected: 07/28/20 15:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-17
Matrix: Solid
Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	08/07/20 21:59	08/11/20 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*31 - 143*	*08/07/20 21:59*	*08/11/20 16:48*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*08/07/20 21:59*	*08/11/20 16:48*	*1*
2-Fluorophenol	*74*		*31 - 166*	*08/07/20 21:59*	*08/11/20 16:48*	*1*
Nitrobenzene-d5	*58*		*37 - 147*	*08/07/20 21:59*	*08/11/20 16:48*	*1*
Phenol-d5	*64*		*30 - 153*	*08/07/20 21:59*	*08/11/20 16:48*	*1*
Terphenyl-d14	*98*		*42 - 157*	*08/07/20 21:59*	*08/11/20 16:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.87**	**J**	1.1	0.22	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Arsenic	**3.2**		0.56	0.19	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Barium	**46**		0.56	0.064	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Beryllium	**0.68**		0.23	0.053	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Boron	**14**		2.8	0.26	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Cadmium	**0.15**		0.11	0.020	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Calcium	**88000**	**B**	110	19	mg/Kg	☼	08/05/20 18:14	08/07/20 01:11	10
Chromium	**19**		0.56	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Cobalt	**7.2**		0.28	0.074	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Copper	**13**		0.56	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Iron	**14000**	**B**	11	5.9	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Lead	**12**		0.28	0.13	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Magnesium	**21000**		5.6	2.8	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Manganese	**230**		0.56	0.082	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Nickel	**26**		0.56	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Potassium	**2800**		28	10	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Sodium	**440**		56	8.4	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Vanadium	**21**		0.28	0.067	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	1
Zinc	**56**		1.1	0.50	mg/Kg	☼	08/05/20 18:14	08/06/20 16:17	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		08/08/20 05:41	08/09/20 23:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:41	08/09/20 23:53	1
Manganese	**1.0**		0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:53	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B06-2

Date Collected: 07/28/20 15:05
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-17

Matrix: Solid
Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.024**	**J**	0.050	0.010	mg/L		08/08/20 05:46	08/10/20 01:35	1
Barium	**0.23**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:35	1
Boron	**0.22**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 01:35	1
Calcium	**33**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:35	1
Chromium	**0.054**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:35	1
Cobalt	**0.013**	**J**	0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:35	1
Iron	**46**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:35	1
Lead	**0.026**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:35	1
Manganese	**0.25**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:35	1
Nickel	**0.054**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:35	1
Potassium	**15**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:35	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:35	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:35	1
Zinc	**0.12**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/08/20 05:46	08/10/20 14:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.019	0.0064	mg/Kg	☼	08/06/20 13:10	08/07/20 08:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.35		0.35	0.17	mg/Kg	☼	08/11/20 10:28	08/11/20 15:01	1
pH	**8.2**		0.2	0.2	SU			08/03/20 20:01	1

Client Sample ID: 3481-1-B06-3
Date Collected: 07/28/20 15:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-18
Matrix: Solid
Percent Solids: 80.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Acetone	**0.0084**	**J**	0.018	0.0079	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Chloromethane	<0.0045	*	0.0045	0.0018	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 134*	*07/29/20 18:30*	*08/05/20 14:41*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*07/29/20 18:30*	*08/05/20 14:41*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*07/29/20 18:30*	*08/05/20 14:41*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*07/29/20 18:30*	*08/05/20 14:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1

Client Sample ID: 3481-1-B06-3
Date Collected: 07/28/20 15:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-18
Matrix: Solid
Percent Solids: 80.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Benzo[g,h,i]perylene	**0.019**	**J**	0.041	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Chrysene	**0.029**	**J**	0.041	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Fluoranthene	**0.0081**	**J**	0.041	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B06-3
Date Collected: 07/28/20 15:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-18
Matrix: Solid
Percent Solids: 80.4

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	<0.041		0.041	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Phenanthrene	**0.029**	**J**	0.041	0.0057	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1
Pyrene	**0.023**	**J**	0.041	0.0082	mg/Kg	☼	08/07/20 21:59	08/11/20 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*66*		*31 - 143*	*08/07/20 21:59*	*08/11/20 17:15*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*08/07/20 21:59*	*08/11/20 17:15*	*1*
2-Fluorophenol	*74*		*31 - 166*	*08/07/20 21:59*	*08/11/20 17:15*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*08/07/20 21:59*	*08/11/20 17:15*	*1*
Phenol-d5	*66*		*30 - 153*	*08/07/20 21:59*	*08/11/20 17:15*	*1*
Terphenyl-d14	*99*		*42 - 157*	*08/07/20 21:59*	*08/11/20 17:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**	**J**	1.2	0.24	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Arsenic	**9.6**		0.62	0.21	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Barium	**30**		0.62	0.070	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Beryllium	**0.79**		0.25	0.057	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Boron	**15**		3.1	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Cadmium	**0.048**	**J**	0.12	0.022	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Calcium	**58000**	**B**	120	21	mg/Kg	☼	08/05/20 18:14	08/07/20 01:15	10
Chromium	**18**		0.62	0.30	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Cobalt	**16**		0.31	0.081	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Copper	**22**		0.62	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Iron	**19000**	**B**	12	6.4	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Lead	**15**		0.31	0.14	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Magnesium	**27000**		6.2	3.1	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Manganese	**330**		0.62	0.089	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Nickel	**36**		0.62	0.18	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Potassium	**3100**		31	11	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Selenium	**0.37**	**J**	0.62	0.36	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Silver	<0.31		0.31	0.079	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Sodium	**190**		62	9.1	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Thallium	**0.35**	**J**	0.62	0.31	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Vanadium	**21**		0.31	0.073	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	1
Zinc	**47**		1.2	0.54	mg/Kg	☼	08/05/20 18:14	08/06/20 16:21	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		08/08/20 05:46	08/10/20 01:39	1
Barium	<0.50		0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:39	1
Boron	**0.13**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:39	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B06-3
Date Collected: 07/28/20 15:10
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-18
Matrix: Solid
Percent Solids: 80.4

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		08/08/20 05:46	08/10/20 01:39	1
Calcium	**24**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:39	1
Chromium	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:39	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:39	1
Iron	<0.40		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:39	1
Manganese	**0.065**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:39	1
Nickel	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:39	1
Potassium	**1.3**	**J**	2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:39	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:39	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:39	1
Zinc	<0.50		0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:39	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		08/08/20 05:46	08/10/20 14:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.020	0.0067	mg/Kg	☼	08/06/20 13:10	08/07/20 08:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.29		0.29	0.15	mg/Kg	☼	08/11/20 10:28	08/11/20 15:02	1
pH	**7.8**		0.2	0.2	SU			08/03/20 20:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B34
Date Collected: 07/28/20 15:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-19
Matrix: Solid
Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Acetone	<0.020		0.020	0.0087	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Chloromethane	<0.0050	*	0.0050	0.0020	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	07/29/20 18:30	08/05/20 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 134*	*07/29/20 18:30*	*08/05/20 15:06*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*07/29/20 18:30*	*08/05/20 15:06*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*07/29/20 18:30*	*08/05/20 15:06*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*07/29/20 18:30*	*08/05/20 15:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1

Client Sample ID: 3481-1-B34
Date Collected: 07/28/20 15:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-19
Matrix: Solid
Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B34
Date Collected: 07/28/20 15:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-19
Matrix: Solid
Percent Solids: 79.8

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	<0.041		0.041	0.011	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Phenol	<0.21		0.21	0.092	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	08/07/20 21:59	08/11/20 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*99*		*31 - 143*	*08/07/20 21:59*	*08/11/20 11:22*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*08/07/20 21:59*	*08/11/20 11:22*	*1*
2-Fluorophenol	*75*		*31 - 166*	*08/07/20 21:59*	*08/11/20 11:22*	*1*
Nitrobenzene-d5	*64*		*37 - 147*	*08/07/20 21:59*	*08/11/20 11:22*	*1*
Phenol-d5	*69*		*30 - 153*	*08/07/20 21:59*	*08/11/20 11:22*	*1*
Terphenyl-d14	*103*		*42 - 157*	*08/07/20 21:59*	*08/11/20 11:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.77**	**J**	1.2	0.23	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Arsenic	**4.3**		0.59	0.20	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Barium	**120**		0.59	0.067	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Beryllium	**0.86**		0.23	0.055	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Boron	**6.5**		2.9	0.27	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Cadmium	**0.21**		0.12	0.021	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Calcium	**5400**	**B**	12	2.0	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Chromium	**19**		0.59	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Cobalt	**6.2**		0.29	0.077	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Copper	**20**		0.59	0.16	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Iron	**16000**	**B**	12	6.1	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Lead	**22**		0.29	0.14	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Magnesium	**3700**		5.9	2.9	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Manganese	**190**		0.59	0.085	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Nickel	**19**		0.59	0.17	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Potassium	**1400**		29	10	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Silver	<0.29		0.29	0.076	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Sodium	**63**		59	8.7	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Vanadium	**32**		0.29	0.069	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	1
Zinc	**80**		1.2	0.51	mg/Kg	☼	08/05/20 18:14	08/06/20 16:25	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		08/08/20 05:41	08/09/20 23:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/08/20 05:41	08/09/20 23:59	1
Manganese	**0.013**	**J**	0.025	0.010	mg/L		08/08/20 05:41	08/09/20 23:59	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Client Sample ID: 3481-1-B34

Date Collected: 07/28/20 15:15
Date Received: 07/28/20 16:40

Lab Sample ID: 500-185586-19

Matrix: Solid
Percent Solids: 79.8

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		08/08/20 05:46	08/10/20 01:43	1
Barium	**0.28**	**J**	0.50	0.050	mg/L		08/08/20 05:46	08/10/20 01:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/08/20 05:46	08/10/20 01:43	1
Boron	**0.18**		0.10	0.050	mg/L		08/08/20 05:46	08/10/20 01:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/08/20 05:46	08/10/20 01:43	1
Calcium	**12**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:43	1
Chromium	**0.044**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:43	1
Cobalt	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:43	1
Iron	**37**		0.40	0.20	mg/L		08/08/20 05:46	08/10/20 01:43	1
Lead	**0.031**		0.0075	0.0075	mg/L		08/08/20 05:46	08/10/20 01:43	1
Manganese	**0.18**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:43	1
Nickel	**0.027**		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:43	1
Potassium	**4.6**		2.5	0.50	mg/L		08/08/20 05:46	08/10/20 01:43	1
Selenium	<0.050		0.050	0.020	mg/L		08/08/20 05:46	08/10/20 01:43	1
Silver	<0.025		0.025	0.010	mg/L		08/08/20 05:46	08/10/20 01:43	1
Zinc	**0.14**	**J**	0.50	0.020	mg/L		08/08/20 05:46	08/10/20 01:43	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		08/08/20 05:46	08/10/20 14:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/08/20 05:46	08/10/20 14:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/10/20 09:55	08/11/20 11:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.045**		0.020	0.0066	mg/Kg	☼	08/06/20 13:10	08/07/20 08:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.27		0.27	0.13	mg/Kg	☼	08/11/20 10:28	08/11/20 15:04	1
pH	**8.2**		0.2	0.2	SU			08/03/20 20:06	1

Definitions/Glossary

Client: Andrews Engineering Inc. Job ID: 500-185586-1
Project/Site: IDOT - AE7-038

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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 exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL.
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
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185586-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-21

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

500-185586 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: AE7-038A
Project No.: PTB/W.O: 184-006 / 38A
TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD [ ] Other
Sampler: Saied Khodei

COC No.: 1 of 2
Lab Job No.: 500-185586
Sample Temp: 2.9, 4.2

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	3481-1-B37	7/28	1300	S	X	X					X	X	X	X	X					
2	3481-1-B36		1310	S																
3	3481-1-B36 Dup		1315	S																
4	3481-1-B35		1340	S																
5	3481-1-B10-1		1400	S																
6	3481-1-B10-2		1405	S																
7	3481-1-B10-3		1410	S																
8	3481-1-B09-1		1420	S																
9	3481-1-B09-2		1425	S																
10	3481-1-B09-3		1430	S																
11	3481-1-B07-1		1435	S																
12	TRIP BLANK #5																			

Relinquished by: Saied Khodei	Date/Time 7/28 1640	Received by: Stephanie Hernandez TA-CHI	Date/Time 7/28/20 1640
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

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: AE7-038A Project No.: PTB/W.O.: 184-006/38A TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other **Sampler:** Saiod Khatei

COC No.: 2 of 2

Lab Job No.: 500-185586

Sample Temp: 2.9 4.2

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	3481-1-B07-2	7/28	1440	S	X	X					X	X	X	X	X					
14	3481-1-B07-2 DUP		1445	S																
15	3481-1-B07-3		1450	S																
16	3481-1-B06-1		1500	S																
17	3481-1-B06-2		1505	S																
18	3481-1-B06-3		1510	S																
19	3481-1-B34		1515	S																
	~~3481-1-G34~~			~~WQ~~	X	X					X		X	X						
	~~TRIP BLANK #6~~																			

Relinquished by: Mike	Date/Time 7/28 1640	Received by: Stephanie Hernandez, TA-CHI	Date/Time 7/28/20 1640
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-185430-1
Client Project/Site: IDOT - AE7-038

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

Attn: Ms. Colleen Grey

Authorized for release by:
8/10/2020 2:35:38 PM

Richard Wright, Senior Project Manager
(708)746-0045
Richard.Wright@Eurofinset.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B29
Date Collected: 07/23/20 09:45
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-2
Matrix: Solid
Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
2-Butanone (MEK)	**0.0030**	**J**	0.0048	0.0021	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Acetone	**0.021**		0.019	0.0084	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/24/20 17:55*	*07/31/20 01:55*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*07/24/20 17:55*	*07/31/20 01:55*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*07/24/20 17:55*	*07/31/20 01:55*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*07/24/20 17:55*	*07/31/20 01:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1

Client Sample ID: 3481-1-B29
Date Collected: 07/23/20 09:45
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-2
Matrix: Solid
Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2-Nitroaniline	<0.20	F1	0.20	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Carbazole	<0.20	F1	0.20	0.10	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Fluoranthene	**0.010**	**J**	0.040	0.0075	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1

Client Sample ID: 3481-1-B29

Date Collected: 07/23/20 09:45
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-2

Matrix: Solid
Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	08/05/20 17:56	08/06/20 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*08/05/20 17:56*	*08/06/20 12:44*	*1*
2-Fluorobiphenyl	*91*		*43 - 145*	*08/05/20 17:56*	*08/06/20 12:44*	*1*
2-Fluorophenol	*118*		*31 - 166*	*08/05/20 17:56*	*08/06/20 12:44*	*1*
Nitrobenzene-d5	*91*		*37 - 147*	*08/05/20 17:56*	*08/06/20 12:44*	*1*
Phenol-d5	*96*		*30 - 153*	*08/05/20 17:56*	*08/06/20 12:44*	*1*
Terphenyl-d14	*168*	*X*	*42 - 157*	*08/05/20 17:56*	*08/06/20 12:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**		1.1	0.22	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Arsenic	**8.7**		0.57	0.20	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Barium	**93**		0.57	0.065	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Beryllium	**0.92**		0.23	0.053	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Boron	**13**	**B**	2.9	0.27	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Cadmium	**0.045**	**J**	0.11	0.021	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Calcium	**64000**	**B**	110	19	mg/Kg	☼	07/31/20 17:43	08/03/20 12:15	10
Chromium	**21**		0.57	0.28	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Cobalt	**14**		0.29	0.075	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Copper	**21**		0.57	0.16	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Iron	**22000**		11	5.9	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Lead	**15**		0.29	0.13	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Magnesium	**21000**		5.7	2.8	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Manganese	**370**		0.57	0.083	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Nickel	**35**		0.57	0.17	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Potassium	**2800**	**B**	29	10	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Selenium	**0.34**	**J**	0.57	0.34	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Sodium	**880**	**B**	57	8.4	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Vanadium	**29**		0.29	0.067	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1
Zinc	**62**		1.1	0.50	mg/Kg	☼	07/31/20 17:43	08/03/20 09:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 20:03	1
Chromium	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:03	1
Iron	<0.40		0.40	0.20	mg/L		08/05/20 06:11	08/05/20 20:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 20:03	1

Client Sample ID: 3481-1-B29
Date Collected: 07/23/20 09:45
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-2
Matrix: Solid
Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**3.2**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:03	1
Nickel	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:03	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		08/05/20 06:11	08/06/20 03:21	1
Barium	**1.0**		0.50	0.050	mg/L		08/05/20 06:11	08/05/20 23:04	1
Beryllium	**0.0079**		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 23:04	1
Boron	**0.20**		0.10	0.050	mg/L		08/05/20 06:11	08/05/20 23:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/05/20 06:11	08/06/20 03:21	1
Calcium	**50**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:04	1
Chromium	**0.20**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:04	1
Cobalt	**0.067**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:04	1
Iron	**140**		0.40	0.20	mg/L		08/06/20 17:31	08/07/20 08:14	1
Lead	**0.083**		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 23:04	1
Manganese	**1.3**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:04	1
Nickel	**0.22**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:04	1
Potassium	**39**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:04	1
Selenium	<0.050		0.050	0.020	mg/L		08/05/20 06:11	08/05/20 23:04	1
Silver	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:04	1
Zinc	**0.39**	**J**	0.50	0.020	mg/L		08/05/20 06:11	08/05/20 23:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/05/20 06:11	08/06/20 14:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/05/20 06:11	08/05/20 14:27	1
Thallium	**0.0035**		0.0020	0.0020	mg/L		08/05/20 06:11	08/05/20 14:27	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		08/05/20 09:50	08/06/20 07:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.020	0.0066	mg/Kg	☼	08/03/20 13:55	08/04/20 08:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	08/04/20 12:45	08/04/20 15:02	1
pH	**8.4**		0.2	0.2	SU			07/30/20 16:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B28
Date Collected: 07/23/20 10:05
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-3
Matrix: Solid
Percent Solids: 80.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Acetone	**0.0096**	**J**	0.017	0.0074	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*07/24/20 17:55*	*07/31/20 02:20*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*07/24/20 17:55*	*07/31/20 02:20*	*1*
Dibromofluoromethane	*99*		*75 - 126*	*07/24/20 17:55*	*07/31/20 02:20*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/24/20 17:55*	*07/31/20 02:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1

Client Sample ID: 3481-1-B28
Date Collected: 07/23/20 10:05
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-3
Matrix: Solid
Percent Solids: 80.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Benzo[a]anthracene	**0.0068**	**J**	0.041	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Benzo[b]fluoranthene	**0.0098**	**J**	0.041	0.0088	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Chrysene	**0.011**	**J**	0.041	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Fluoranthene	**0.019**	**J**	0.041	0.0076	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1

Client Sample ID: 3481-1-B28
Date Collected: 07/23/20 10:05
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-3
Matrix: Solid
Percent Solids: 80.2

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	<0.041		0.041	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1
Pyrene	**0.0098**	**J**	0.041	0.0081	mg/Kg	☼	08/05/20 17:56	08/06/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*61*		*31 - 143*	*08/05/20 17:56*	*08/06/20 16:51*	*1*
2-Fluorobiphenyl	*94*		*43 - 145*	*08/05/20 17:56*	*08/06/20 16:51*	*1*
2-Fluorophenol	*114*		*31 - 166*	*08/05/20 17:56*	*08/06/20 16:51*	*1*
Nitrobenzene-d5	*95*		*37 - 147*	*08/05/20 17:56*	*08/06/20 16:51*	*1*
Phenol-d5	*93*		*30 - 153*	*08/05/20 17:56*	*08/06/20 16:51*	*1*
Terphenyl-d14	*167*	*X*	*42 - 157*	*08/05/20 17:56*	*08/06/20 16:51*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.88**	**J**	1.2	0.24	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Arsenic	**5.9**		0.62	0.21	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Barium	**65**		0.62	0.070	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Beryllium	**0.87**		0.25	0.057	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Boron	**15**	**B**	3.1	0.29	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Cadmium	**0.10**	**J**	0.12	0.022	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Calcium	**77000**	**B**	120	21	mg/Kg	☼	07/31/20 17:43	08/03/20 12:19	10
Chromium	**21**		0.62	0.30	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Cobalt	**11**		0.31	0.081	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Copper	**18**		0.62	0.17	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Iron	**19000**		12	6.4	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Lead	**12**		0.31	0.14	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Magnesium	**21000**		6.2	3.1	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Manganese	**290**		0.62	0.089	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Nickel	**29**		0.62	0.18	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Potassium	**3100**	**B**	31	11	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Selenium	**0.41**	**J**	0.62	0.36	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Silver	<0.31		0.31	0.079	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Sodium	**920**	**B**	62	9.1	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Thallium	**0.33**	**J**	0.62	0.31	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Vanadium	**28**		0.31	0.073	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	1
Zinc	**56**		1.2	0.54	mg/Kg	☼	07/31/20 17:43	08/03/20 09:46	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		08/05/20 06:11	08/05/20 20:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 20:44	1
Chromium	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:44	1
Iron	<0.40		0.40	0.20	mg/L		08/05/20 06:11	08/05/20 20:44	1

Client Sample ID: 3481-1-B28
Date Collected: 07/23/20 10:05
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-3
Matrix: Solid
Percent Solids: 80.2

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		08/05/20 06:11	08/05/20 20:44	1
Manganese	**4.2**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:44	1
Nickel	**0.041**		0.025	0.010	mg/L		08/05/20 06:11	08/06/20 11:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.12**		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 23:08	1
Barium	**0.79**		0.50	0.050	mg/L		08/05/20 06:11	08/05/20 23:08	1
Beryllium	**0.0097**		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 23:08	1
Boron	**0.23**		0.10	0.050	mg/L		08/05/20 06:11	08/05/20 23:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/05/20 06:11	08/05/20 23:08	1
Calcium	**86**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:08	1
Chromium	**0.22**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:08	1
Cobalt	**0.062**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:08	1
Iron	**210**		0.40	0.20	mg/L		08/06/20 17:31	08/07/20 08:18	1
Lead	**0.098**		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 23:08	1
Manganese	**1.0**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:08	1
Nickel	**0.26**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:08	1
Potassium	**40**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:08	1
Selenium	<0.050		0.050	0.020	mg/L		08/05/20 06:11	08/05/20 23:08	1
Silver	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:08	1
Zinc	**0.53**		0.50	0.020	mg/L		08/05/20 06:11	08/05/20 23:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/05/20 06:11	08/06/20 14:55	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		08/05/20 06:11	08/05/20 14:31	1
Thallium	**0.0038**		0.0020	0.0020	mg/L		08/05/20 06:11	08/05/20 14:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0010		0.0010	0.0010	mg/L		08/05/20 09:50	08/06/20 07:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.028**		0.019	0.0062	mg/Kg	☼	08/03/20 13:55	08/04/20 08:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.25	mg/Kg	☼	08/04/20 12:45	08/04/20 15:02	1
pH	**8.8**		0.2	0.2	SU			07/30/20 16:58	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B25
Date Collected: 07/23/20 10:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-5
Matrix: Solid
Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
2-Butanone (MEK)	**0.0034**	**J**	0.0052	0.0023	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Acetone	**0.031**		0.021	0.0091	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Chloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Methylene Chloride	<0.0052		0.0052	0.0021	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 134*	*07/24/20 17:55*	*07/31/20 03:10*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*07/24/20 17:55*	*07/31/20 03:10*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*07/24/20 17:55*	*07/31/20 03:10*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/24/20 17:55*	*07/31/20 03:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1

Client Sample ID: 3481-1-B25
Date Collected: 07/23/20 10:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-5
Matrix: Solid
Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Fluoranthene	**0.011**	**J**	0.039	0.0073	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1

Client Sample ID: 3481-1-B25
Date Collected: 07/23/20 10:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-5
Matrix: Solid
Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	08/05/20 17:56	08/06/20 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*61*		*31 - 143*	*08/05/20 17:56*	*08/06/20 13:39*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*08/05/20 17:56*	*08/06/20 13:39*	*1*
2-Fluorophenol	*108*		*31 - 166*	*08/05/20 17:56*	*08/06/20 13:39*	*1*
Nitrobenzene-d5	*83*		*37 - 147*	*08/05/20 17:56*	*08/06/20 13:39*	*1*
Phenol-d5	*83*		*30 - 153*	*08/05/20 17:56*	*08/06/20 13:39*	*1*
Terphenyl-d14	*146*		*42 - 157*	*08/05/20 17:56*	*08/06/20 13:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.4**		1.2	0.23	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Arsenic	**8.8**		0.58	0.20	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Barium	**61**		0.58	0.067	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Beryllium	**0.87**		0.23	0.055	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Boron	**15**	**B**	2.9	0.27	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Cadmium	**0.098**	**J**	0.12	0.021	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Calcium	**67000**	**B**	120	20	mg/Kg	☼	07/31/20 17:43	08/03/20 12:23	10
Chromium	**19**		0.58	0.29	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Cobalt	**12**		0.29	0.076	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Copper	**21**		0.58	0.16	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Iron	**21000**		12	6.1	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Lead	**19**		0.29	0.13	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Magnesium	**22000**		5.8	2.9	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Manganese	**350**		0.58	0.085	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Nickel	**33**		0.58	0.17	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Potassium	**3000**	**B**	29	10	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Sodium	**960**	**B**	58	8.6	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Vanadium	**28**		0.29	0.069	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1
Zinc	**63**		1.2	0.51	mg/Kg	☼	07/31/20 17:43	08/03/20 09:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 20:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 20:47	1
Chromium	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:47	1
Iron	<0.40		0.40	0.20	mg/L		08/05/20 06:11	08/05/20 20:47	1

Client Sample ID: 3481-1-B25
Date Collected: 07/23/20 10:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-5
Matrix: Solid
Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 20:47	1
Manganese	**4.7**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:47	1
Nickel	**0.041**		0.025	0.010	mg/L		08/05/20 06:11	08/06/20 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.081**		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 23:27	1
Barium	**0.62**		0.50	0.050	mg/L		08/05/20 06:11	08/05/20 23:27	1
Beryllium	**0.0073**		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 23:27	1
Boron	**0.23**		0.10	0.050	mg/L		08/05/20 06:11	08/05/20 23:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/05/20 06:11	08/05/20 23:27	1
Calcium	**75**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:27	1
Chromium	**0.16**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:27	1
Cobalt	**0.051**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:27	1
Iron	**170**		0.40	0.20	mg/L		08/06/20 17:31	08/07/20 08:25	1
Lead	**0.12**		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 23:27	1
Manganese	**0.90**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:27	1
Nickel	**0.20**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:27	1
Potassium	**34**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:27	1
Selenium	<0.050		0.050	0.020	mg/L		08/05/20 06:11	08/05/20 23:27	1
Silver	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:27	1
Zinc	**0.44**	**J**	0.50	0.020	mg/L		08/05/20 06:11	08/05/20 23:27	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		08/05/20 06:11	08/06/20 14:57	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		08/05/20 06:11	08/05/20 14:38	1
Thallium	**0.0038**		0.0020	0.0020	mg/L		08/05/20 06:11	08/05/20 14:38	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		08/05/20 09:50	08/06/20 07:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.045**		0.019	0.0064	mg/Kg	☼	08/03/20 13:55	08/04/20 08:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.29	mg/Kg	☼	08/04/20 12:45	08/04/20 15:03	1
pH	**8.5**		0.2	0.2	SU			07/30/20 17:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B22
Date Collected: 07/23/20 10:50
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-6
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*07/24/20 17:55*	*07/31/20 03:35*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*07/24/20 17:55*	*07/31/20 03:35*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*07/24/20 17:55*	*07/31/20 03:35*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/24/20 17:55*	*07/31/20 03:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1

Client Sample ID: 3481-1-B22
Date Collected: 07/23/20 10:50
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-6
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2,4-Dinitrophenol	<0.80		0.80	0.69	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Benzo[a]anthracene	**0.0064**	**J**	0.039	0.0053	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Fluoranthene	**0.017**	**J**	0.039	0.0073	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B22
Date Collected: 07/23/20 10:50
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-6
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	08/05/20 17:56	08/06/20 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*67*		*31 - 143*	*08/05/20 17:56*	*08/06/20 17:18*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*08/05/20 17:56*	*08/06/20 17:18*	*1*
2-Fluorophenol	*112*		*31 - 166*	*08/05/20 17:56*	*08/06/20 17:18*	*1*
Nitrobenzene-d5	*94*		*37 - 147*	*08/05/20 17:56*	*08/06/20 17:18*	*1*
Phenol-d5	*95*		*30 - 153*	*08/05/20 17:56*	*08/06/20 17:18*	*1*
Terphenyl-d14	*157*		*42 - 157*	*08/05/20 17:56*	*08/06/20 17:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.4**		1.2	0.23	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Arsenic	**8.8**		0.59	0.20	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Barium	**48**		0.59	0.068	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Beryllium	**0.90**		0.24	0.055	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Boron	**16**	**B**	3.0	0.28	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Cadmium	**0.10**	**J**	0.12	0.021	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Calcium	**62000**	**B**	120	20	mg/Kg	☼	07/31/20 17:43	08/03/20 12:27	10
Chromium	**20**		0.59	0.29	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Cobalt	**12**		0.30	0.078	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Copper	**24**		0.59	0.17	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Iron	**21000**		12	6.2	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Lead	**15**		0.30	0.14	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Magnesium	**22000**		5.9	2.9	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Manganese	**280**		0.59	0.086	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Nickel	**32**		0.59	0.17	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Potassium	**3200**	**B**	30	10	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Silver	<0.30		0.30	0.076	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Sodium	**920**	**B**	59	8.8	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Thallium	<0.59		0.59	0.30	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Vanadium	**27**		0.30	0.070	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	1
Zinc	**65**		1.2	0.52	mg/Kg	☼	07/31/20 17:43	08/03/20 09:58	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		08/05/20 06:11	08/05/20 20:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 20:09	1
Chromium	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:09	1
Iron	<0.40		0.40	0.20	mg/L		08/05/20 06:11	08/05/20 20:09	1

Client Sample ID: 3481-1-B22

Date Collected: 07/23/20 10:50
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-6

Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 20:09	1
Manganese	**2.2**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:09	1
Nickel	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.093**		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 23:31	1
Barium	**0.64**		0.50	0.050	mg/L		08/05/20 06:11	08/05/20 23:31	1
Beryllium	**0.0074**		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 23:31	1
Boron	**0.21**		0.10	0.050	mg/L		08/05/20 06:11	08/05/20 23:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/05/20 06:11	08/05/20 23:31	1
Calcium	**88**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:31	1
Chromium	**0.17**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:31	1
Cobalt	**0.084**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:31	1
Iron	**170**		0.40	0.20	mg/L		08/06/20 17:31	08/07/20 08:29	1
Lead	**0.096**		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 23:31	1
Manganese	**1.3**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:31	1
Nickel	**0.25**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:31	1
Potassium	**38**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:31	1
Selenium	<0.050		0.050	0.020	mg/L		08/05/20 06:11	08/05/20 23:31	1
Silver	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:31	1
Zinc	**0.48**	**J**	0.50	0.020	mg/L		08/05/20 06:11	08/05/20 23:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/05/20 06:11	08/06/20 14:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/05/20 06:11	08/05/20 14:41	1
Thallium	**0.0043**		0.0020	0.0020	mg/L		08/05/20 06:11	08/05/20 14:41	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		08/05/20 09:50	08/06/20 07:47	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	☼	08/03/20 13:55	08/04/20 08:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.24	mg/Kg	☼	08/04/20 12:45	08/04/20 15:04	1
pH	**8.4**		0.2	0.2	SU			07/30/20 17:07	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B20
Date Collected: 07/23/20 11:00
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-7
Matrix: Solid
Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
1,1-Dichloroethene	<0.0020	*	0.0020	0.00067	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
1,2-Dichloropropane	<0.0020		0.0020	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Acetone	**0.010**	**J**	0.020	0.0085	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Ethylbenzene	<0.0020		0.0020	0.00093	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Tetrachloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Toluene	<0.0020		0.0020	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00086	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Vinyl chloride	<0.0020		0.0020	0.00086	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*07/24/20 17:55*	*07/31/20 16:40*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*07/24/20 17:55*	*07/31/20 16:40*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*07/24/20 17:55*	*07/31/20 16:40*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*07/24/20 17:55*	*07/31/20 16:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1

Client Sample ID: 3481-1-B20
Date Collected: 07/23/20 11:00
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-7
Matrix: Solid
Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.095	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2,4-Dichlorophenol	<0.42		0.42	0.099	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2,4-Dinitrophenol	<0.84		0.84	0.74	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Benzo[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Benzo[b]fluoranthene	<0.042		0.042	0.0090	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Benzo[g,h,i]perylene	<0.042		0.042	0.013	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Fluoranthene	**0.014**	**J**	0.042	0.0078	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B20
Date Collected: 07/23/20 11:00
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-7
Matrix: Solid
Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Naphthalene	<0.042		0.042	0.0064	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Phenanthrene	<0.042		0.042	0.0058	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1
Pyrene	<0.042		0.042	0.0083	mg/Kg	☼	08/05/20 17:56	08/06/20 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*55*		*31 - 143*	*08/05/20 17:56*	*08/06/20 15:56*	*1*
2-Fluorobiphenyl	*68*		*43 - 145*	*08/05/20 17:56*	*08/06/20 15:56*	*1*
2-Fluorophenol	*100*		*31 - 166*	*08/05/20 17:56*	*08/06/20 15:56*	*1*
Nitrobenzene-d5	*73*		*37 - 147*	*08/05/20 17:56*	*08/06/20 15:56*	*1*
Phenol-d5	*81*		*30 - 153*	*08/05/20 17:56*	*08/06/20 15:56*	*1*
Terphenyl-d14	*141*		*42 - 157*	*08/05/20 17:56*	*08/06/20 15:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.85**	**J**	1.2	0.23	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Arsenic	**8.4**		0.60	0.21	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Barium	**130**		0.60	0.069	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Beryllium	**0.94**		0.24	0.056	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Boron	**4.3**	**B**	3.0	0.28	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Cadmium	<0.12		0.12	0.022	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Calcium	**2300**	**B**	12	2.0	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Chromium	**20**		0.60	0.30	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Cobalt	**14**		0.30	0.079	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Copper	**15**		0.60	0.17	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Iron	**21000**		12	6.3	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Lead	**16**		0.30	0.14	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Magnesium	**3100**		6.0	3.0	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Manganese	**740**		0.60	0.087	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Nickel	**26**		0.60	0.18	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Potassium	**1100**	**B**	30	11	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Selenium	**0.92**		0.60	0.35	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Silver	<0.30		0.30	0.078	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Sodium	**2400**	**B**	60	8.9	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Vanadium	**41**		0.30	0.071	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1
Zinc	**59**		1.2	0.53	mg/Kg	☼	07/31/20 17:43	08/03/20 10:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 20:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 20:12	1
Chromium	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:12	1
Iron	<0.40		0.40	0.20	mg/L		08/05/20 06:11	08/05/20 20:12	1

Client Sample ID: 3481-1-B20

Date Collected: 07/23/20 11:00
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-7

Matrix: Solid
Percent Solids: 78.3

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		08/05/20 06:11	08/05/20 20:12	1
Manganese	**0.019**	**J**	0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:12	1
Nickel	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.061**		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 23:35	1
Barium	**1.3**		0.50	0.050	mg/L		08/05/20 06:11	08/05/20 23:35	1
Beryllium	**0.0092**		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 23:35	1
Boron	**0.11**		0.10	0.050	mg/L		08/05/20 06:11	08/05/20 23:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/05/20 06:11	08/05/20 23:35	1
Calcium	**27**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:35	1
Chromium	**0.22**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:35	1
Cobalt	**0.035**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:35	1
Iron	**190**		0.40	0.20	mg/L		08/06/20 17:31	08/07/20 08:33	1
Lead	**0.049**		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 23:35	1
Manganese	**0.63**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:35	1
Nickel	**0.19**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:35	1
Potassium	**16**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:35	1
Selenium	<0.050		0.050	0.020	mg/L		08/05/20 06:11	08/05/20 23:35	1
Silver	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:35	1
Zinc	**0.64**		0.50	0.020	mg/L		08/05/20 06:11	08/05/20 23:35	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		08/05/20 06:11	08/06/20 14:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/05/20 06:11	08/05/20 14:45	1
Thallium	**0.0028**		0.0020	0.0020	mg/L		08/05/20 06:11	08/05/20 14:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0010		0.0010	0.0010	mg/L		08/05/20 09:50	08/06/20 07:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.055**		0.019	0.0065	mg/Kg	☼	08/03/20 13:55	08/04/20 08:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.30	mg/Kg	☼	08/04/20 12:45	08/04/20 15:05	1
pH	**8.1**		0.2	0.2	SU			07/30/20 17:12	1

Client Sample ID: 3481-1-B19
Date Collected: 07/23/20 11:20
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-8
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Acetone	**0.0074**	**J**	0.017	0.0073	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	07/24/20 17:55	07/31/20 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*07/24/20 17:55*	*07/31/20 04:26*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*07/24/20 17:55*	*07/31/20 04:26*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*07/24/20 17:55*	*07/31/20 04:26*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*07/24/20 17:55*	*07/31/20 04:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B19
Date Collected: 07/23/20 11:20
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-8
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1

Client Sample ID: 3481-1-B19

Date Collected: 07/23/20 11:20
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-8

Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	08/05/20 17:56	08/06/20 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*55*		*31 - 143*	*08/05/20 17:56*	*08/06/20 11:49*	*1*
2-Fluorobiphenyl	*69*		*43 - 145*	*08/05/20 17:56*	*08/06/20 11:49*	*1*
2-Fluorophenol	*97*		*31 - 166*	*08/05/20 17:56*	*08/06/20 11:49*	*1*
Nitrobenzene-d5	*68*		*37 - 147*	*08/05/20 17:56*	*08/06/20 11:49*	*1*
Phenol-d5	*81*		*30 - 153*	*08/05/20 17:56*	*08/06/20 11:49*	*1*
Terphenyl-d14	*150*		*42 - 157*	*08/05/20 17:56*	*08/06/20 11:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.2**		1.1	0.22	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Arsenic	**5.9**		0.56	0.19	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Barium	**75**		0.56	0.064	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Beryllium	**0.94**		0.22	0.052	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Boron	**14**	**B**	2.8	0.26	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Cadmium	**0.043**	**J**	0.11	0.020	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Calcium	**61000**	**B**	110	19	mg/Kg	☼	07/31/20 17:43	08/03/20 12:31	10
Chromium	**21**		0.56	0.28	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Cobalt	**11**		0.28	0.073	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Copper	**18**		0.56	0.16	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Iron	**19000**		11	5.8	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Lead	**11**		0.28	0.13	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Magnesium	**21000**		5.6	2.8	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Manganese	**250**		0.56	0.081	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Nickel	**31**		0.56	0.16	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Potassium	**3400**	**B**	28	9.9	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Sodium	**830**	**B**	56	8.2	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Vanadium	**25**		0.28	0.066	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	1
Zinc	**53**		1.1	0.49	mg/Kg	☼	07/31/20 17:43	08/03/20 10:06	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		08/05/20 06:11	08/05/20 20:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 20:15	1
Chromium	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:15	1
Iron	<0.40		0.40	0.20	mg/L		08/05/20 06:11	08/05/20 20:15	1

Client Sample ID: 3481-1-B19
Date Collected: 07/23/20 11:20
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-8
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 20:15	1
Manganese	**0.57**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:15	1
Nickel	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.082**		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 23:39	1
Barium	**0.67**		0.50	0.050	mg/L		08/05/20 06:11	08/05/20 23:39	1
Beryllium	**0.010**		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 23:39	1
Boron	**0.27**		0.10	0.050	mg/L		08/05/20 06:11	08/05/20 23:39	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/05/20 06:11	08/05/20 23:39	1
Calcium	**40**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:39	1
Chromium	**0.21**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:39	1
Cobalt	**0.058**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:39	1
Iron	**190**		0.40	0.20	mg/L		08/06/20 17:31	08/07/20 08:37	1
Lead	**0.090**		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 23:39	1
Manganese	**0.70**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:39	1
Nickel	**0.22**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:39	1
Potassium	**53**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:39	1
Selenium	<0.050		0.050	0.020	mg/L		08/05/20 06:11	08/05/20 23:39	1
Silver	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:39	1
Zinc	**0.37**	**J**	0.50	0.020	mg/L		08/05/20 06:11	08/05/20 23:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		08/05/20 06:11	08/06/20 14:43	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		08/05/20 06:11	08/05/20 14:49	1
Thallium	**0.0049**		0.0020	0.0020	mg/L		08/05/20 06:11	08/05/20 14:49	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		08/05/20 09:50	08/06/20 07:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.019	0.0062	mg/Kg	☼	08/03/20 13:55	08/04/20 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.24	mg/Kg	☼	08/04/20 12:45	08/04/20 15:05	1
pH	**9.0**		0.2	0.2	SU			07/30/20 17:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Client Sample ID: 3481-1-B18
Date Collected: 07/23/20 11:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-9
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	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	07/24/20 17:55	07/31/20 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*07/24/20 17:55*	*07/31/20 04:52*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*07/24/20 17:55*	*07/31/20 04:52*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*07/24/20 17:55*	*07/31/20 04:52*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*07/24/20 17:55*	*07/31/20 04:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1

Client Sample ID: 3481-1-B18
Date Collected: 07/23/20 11:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-9
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	<0.39		0.39	0.089	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Benzo[a]anthracene	**0.0060**	**J**	0.039	0.0053	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Bis(2-ethylhexyl) phthalate	**0.077**	**J**	0.20	0.071	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Fluoranthene	**0.015**	**J**	0.039	0.0072	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1

Client Sample ID: 3481-1-B18
Date Collected: 07/23/20 11:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-9
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	<0.039		0.039	0.010	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	08/05/20 17:56	08/06/20 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*55*		*31 - 143*	*08/05/20 17:56*	*08/06/20 17:46*	*1*
2-Fluorobiphenyl	*92*		*43 - 145*	*08/05/20 17:56*	*08/06/20 17:46*	*1*
2-Fluorophenol	*112*		*31 - 166*	*08/05/20 17:56*	*08/06/20 17:46*	*1*
Nitrobenzene-d5	*88*		*37 - 147*	*08/05/20 17:56*	*08/06/20 17:46*	*1*
Phenol-d5	*95*		*30 - 153*	*08/05/20 17:56*	*08/06/20 17:46*	*1*
Terphenyl-d14	*159*	*X*	*42 - 157*	*08/05/20 17:56*	*08/06/20 17:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.5**		1.1	0.22	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Arsenic	**12**		0.55	0.19	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Barium	**57**		0.55	0.063	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Beryllium	**0.85**		0.22	0.052	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Boron	**14**	**B**	2.8	0.26	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Calcium	**83000**	**B**	110	19	mg/Kg	☼	07/31/20 17:43	08/03/20 12:35	10
Chromium	**17**		0.55	0.27	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Cobalt	**14**		0.28	0.073	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Copper	**22**		0.55	0.16	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Iron	**28000**		11	5.8	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Lead	**15**		0.28	0.13	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Magnesium	**30000**		5.5	2.8	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Manganese	**430**		0.55	0.080	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Nickel	**31**		0.55	0.16	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Potassium	**2700**	**B**	28	9.8	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Selenium	**0.50**	**J**	0.55	0.33	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Sodium	**670**	**B**	55	8.2	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Vanadium	**26**		0.28	0.065	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	1
Zinc	**62**		1.1	0.49	mg/Kg	☼	07/31/20 17:43	08/03/20 10:10	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		08/05/20 06:11	08/05/20 20:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 20:50	1
Chromium	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:50	1
Iron	<0.40		0.40	0.20	mg/L		08/05/20 06:11	08/05/20 20:50	1

Client Sample ID: 3481-1-B18
Date Collected: 07/23/20 11:35
Date Received: 07/24/20 12:40

Lab Sample ID: 500-185430-9
Matrix: Solid
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 20:50	1
Manganese	**3.2**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 20:50	1
Nickel	**0.038**		0.025	0.010	mg/L		08/05/20 06:11	08/06/20 11:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.097**		0.050	0.010	mg/L		08/05/20 06:11	08/05/20 23:43	1
Barium	**0.70**		0.50	0.050	mg/L		08/05/20 06:11	08/05/20 23:43	1
Beryllium	**0.0083**		0.0040	0.0040	mg/L		08/05/20 06:11	08/05/20 23:43	1
Boron	**0.26**		0.10	0.050	mg/L		08/05/20 06:11	08/05/20 23:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/05/20 06:11	08/05/20 23:43	1
Calcium	**76**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:43	1
Chromium	**0.19**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:43	1
Cobalt	**0.054**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:43	1
Iron	**170**		0.40	0.20	mg/L		08/06/20 17:31	08/07/20 08:49	1
Lead	**0.087**		0.0075	0.0075	mg/L		08/05/20 06:11	08/05/20 23:43	1
Manganese	**0.77**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:43	1
Nickel	**0.21**		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:43	1
Potassium	**45**		2.5	0.50	mg/L		08/05/20 06:11	08/05/20 23:43	1
Selenium	<0.050		0.050	0.020	mg/L		08/05/20 06:11	08/05/20 23:43	1
Silver	<0.025		0.025	0.010	mg/L		08/05/20 06:11	08/05/20 23:43	1
Zinc	**0.47**	**J**	0.50	0.020	mg/L		08/05/20 06:11	08/05/20 23:43	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		08/05/20 06:11	08/06/20 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		08/05/20 06:11	08/05/20 15:03	1
Thallium	**0.0045**		0.0020	0.0020	mg/L		08/05/20 06:11	08/05/20 15:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00023**		0.00020	0.00020	mg/L		08/05/20 09:50	08/06/20 07:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.018	0.0060	mg/Kg	☼	08/03/20 13:55	08/04/20 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.29	mg/Kg	☼	08/04/20 12:45	08/04/20 15:06	1
pH	**8.8**		0.2	0.2	SU			07/30/20 17:17	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-038

Job ID: 500-185430-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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 recovery exceeds control limits

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 exceeds control limits.
F3	Duplicate RPD exceeds the control limit
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
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 - AE7-038

Job ID: 500-185430-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-20 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING

500-185430 COC

Client Contact

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217-787-2334
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Laboratory

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

Project Name: AE7-38A
Project No.: PTB/WO: 184-006 / 38A
TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other
Sampler: JOSHUA HEY

COC No.: 1 of 1
Lab Job No.: 500-185430
Sample Temp: 4.6/4.7

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	3481-1-B30	7-23	0935	S	X	X					X	X	X	X	X					
2	3481-1-B29		0945																	
3	3481-1-B28		1005																	
4	3481-1-B27		1015																	
5	3481-1-B25		1035																	
6	3481-1-B22		1050																	
7	3481-1-B20		1100																	
8	3481-1-19		1120																	
9	3481-1-18		1135																	
10	3481-1-17		1150																	
	[redacted]			↓	↓	↓					↓	↓	↓	↓	↓					
11	TRIP BLANK #1	↓																		

Relinquished by:	Date/Time 7-24-2020 0830	Received by:	Date/Time 7/24/20 0830
Relinquished by:	Date/Time 7-25-2020 1150	Received by:	Date/Time 7/24/20 1150
Relinquished by:	Date/Time 7/24/20 1240	Received by:	Date/Time 7/24/20 1240