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: Rodenburg Team Section Headquarters (E14) Office Phone Number, if available:

Physical Site Location (address, including number and street):
1480 Rodenburg Road (northwest corner of the intersection of Rodenburg Road and Frontage Road West)

City: Schaumburg State: IL Zip Code: 60193

County: Cook Township: Schaumburg

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

Latitude: 41.99935 (Decimal Degrees) Longitude: -87.10964 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

IEPA Site Number(s), if assigned: BOL: 0314895173 BOW: BOA:

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

Estimated Volume of debris (cu. Yd.): 2,323

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

LOCATIONS E14-B01, E14-B02, E14-B03, E14-B04, E14-B05, E14-B07, E14-B13, E14-B15, E14-B18, AND E14-B19 WERE SAMPLED AT THE RODENBURG TEAM SECTION HEADQUARTERS (E14). 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 ANALYTICAL REPORTS - EUROFINS JOB ID NUMBERS: 500-248064-1 AND 500-248127-1.

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:

Jun 7, 2024
Date:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

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

Rodenburg Team Section
Headquarters (E14)

Sample ID	E14-B01	E14-B02	E14-B03	E14-B04	E14-B05	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-2	0-2	0-2	0-2	0-2					
Sample Date	3/25/2024	3/25/2024	3/25/2024	3/25/2024	3/25/2024					
PID	0	0	0	0	0					
Sample pH	7.6	7.5	7.7	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	**0.093** **1,2**	0.09	0.09	0.98	11.4	2.1

Sample ID	E14-B07	E14-B13	E14-B15	E14-B18	E14-B19	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-2	0-2	0-2	0-2	0-2					
Sample Date	3/25/2024	3/25/2024	3/26/2024	3/26/2024	3/26/2024					
PID	0	0	0	0	0					
Sample pH	8	7.7	8.7	7.4	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	**0.038**	**0.051**	ND	ND	ND	0.09	0.09	0.98	11.4	2.1

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/10/2024 6:48:31 AM

JOB DESCRIPTION

IDOT - AE8-025A

JOB NUMBER

500-248064-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization

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Authorized for release by
Jodie Bracken, Project Manager I
Jodie.Bracken@ET.EurofinsUS.com
(708)534-5200

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B01
Date Collected: 03/25/24 09:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-1
Matrix: Solid
Percent Solids: 87.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
1,1,2,2-Tetrachloroethane	<0.0014	*3	0.0014	0.00046	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	03/26/24 15:38	03/29/24 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 134*	*03/26/24 15:38*	*03/29/24 12:36*	*1*
4-Bromofluorobenzene (Surr)	*140*	*3 S1+	*75 - 131*	*03/26/24 15:38*	*03/29/24 12:36*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 126*	*03/26/24 15:38*	*03/29/24 12:36*	*1*
Toluene-d8 (Surr)	*119*		*75 - 124*	*03/26/24 15:38*	*03/29/24 12:36*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
1,2-Dichlorobenzene	<0.18		0.18	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
1,3-Dichlorobenzene	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
1,4-Dichlorobenzene	<0.18		0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B01
Date Collected: 03/25/24 09:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-1
Matrix: Solid
Percent Solids: 87.6

Method: SW846 8270E - 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	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2,4,6-Trichlorophenol	<0.36		0.36	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2,4-Dichlorophenol	<0.36		0.36	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2,4-Dimethylphenol	<0.36		0.36	0.081	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2,4-Dinitrophenol	<0.73		0.73	0.21	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2,4-Dinitrotoluene	<0.18		0.18	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2,6-Dinitrotoluene	<0.18		0.18	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2-Chloronaphthalene	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2-Chlorophenol	<0.18		0.18	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2-Methylnaphthalene	**0.022**	**J**	0.073	0.0072	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2-Methylphenol	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2-Nitroaniline	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
2-Nitrophenol	<0.36		0.36	0.024	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
3 & 4 Methylphenol	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.029	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
3-Nitroaniline	<0.36		0.36	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.20	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
4-Chloro-3-methylphenol	<0.36		0.36	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
4-Chloroaniline	<0.73		0.73	0.38	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
4-Nitroaniline	<0.36		0.36	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
4-Nitrophenol	<0.73		0.73	0.13	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Acenaphthene	<0.036		0.036	0.0073	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Acenaphthylene	<0.036		0.036	0.0061	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Anthracene	<0.036		0.036	0.0074	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Benzo[a]anthracene	**0.012**	**J B**	0.036	0.0076	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Benzo[a]pyrene	<0.036		0.036	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Benzo[b]fluoranthene	<0.036		0.036	0.034	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Benzo[g,h,i]perylene	**0.024**	**J B**	0.036	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Benzo[k]fluoranthene	<0.036		0.036	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.14	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Butyl benzyl phthalate	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Carbazole	<0.18		0.18	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Chrysene	**0.018**	**J B**	0.036	0.0095	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Dibenz(a,h)anthracene	<0.036		0.036	0.036	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Dibenzofuran	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Diethyl phthalate	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Dimethyl phthalate	<0.18		0.18	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Di-n-butyl phthalate	<0.18		0.18	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Di-n-octyl phthalate	<0.36		0.36	0.25	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Fluoranthene	**0.010**	**J**	0.036	0.0084	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Fluorene	<0.036		0.036	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Hexachlorobenzene	<0.073		0.073	0.0069	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Hexachlorobutadiene	<0.18		0.18	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Hexachlorocyclopentadiene	<0.73		0.73	0.38	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Hexachloroethane	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1

Client Sample ID: E14-B01
Date Collected: 03/25/24 09:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-1
Matrix: Solid
Percent Solids: 87.6

Method: SW846 8270E - 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	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Isophorone	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Naphthalene	<0.036		0.036	0.0065	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Nitrobenzene	<0.036		0.036	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.0071	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
N-Nitrosodiphenylamine	<0.18		0.18	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Pentachlorophenol	<0.73		0.73	0.090	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Phenanthrene	**0.028**	**J**	0.036	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Phenol	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1
Pyrene	**0.014**	**J B**	0.036	0.0098	mg/Kg	☼	03/31/24 15:20	04/03/24 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*93*		*31 - 143*	*03/31/24 15:20*	*04/03/24 12:06*	*1*
2-Fluorobiphenyl (Surr)	*79*		*43 - 145*	*03/31/24 15:20*	*04/03/24 12:06*	*1*
2-Fluorophenol (Surr)	*76*		*31 - 166*	*03/31/24 15:20*	*04/03/24 12:06*	*1*
Nitrobenzene-d5 (Surr)	*68*		*37 - 147*	*03/31/24 15:20*	*04/03/24 12:06*	*1*
Phenol-d5 (Surr)	*73*		*30 - 153*	*03/31/24 15:20*	*04/03/24 12:06*	*1*
Terphenyl-d14 (Surr)	*90*		*42 - 157*	*03/31/24 15:20*	*04/03/24 12:06*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.57**	**J**	2.1	0.41	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Arsenic	**8.0**		1.0	0.36	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Barium	**48**	**B**	1.0	0.12	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Beryllium	**0.73**	**J**	2.1	0.49	mg/Kg	☼	03/28/24 08:54	04/03/24 17:33	5
Boron	**14**	**B**	5.2	0.49	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Cadmium	**0.16**	**J**	0.21	0.037	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Calcium	**71000**	**B**	100	18	mg/Kg	☼	03/28/24 08:54	04/03/24 17:33	5
Chromium	**16**		1.0	0.52	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Cobalt	**13**		0.52	0.14	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Copper	**22**		1.0	0.29	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Iron	**22000**		100	54	mg/Kg	☼	03/28/24 08:54	04/03/24 17:33	5
Lead	**17**		2.6	1.2	mg/Kg	☼	03/28/24 08:54	04/03/24 17:33	5
Magnesium	**36000**		52	26	mg/Kg	☼	03/28/24 08:54	04/03/24 17:33	5
Manganese	**450**	**B**	1.0	0.15	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Nickel	**28**		1.0	0.30	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Potassium	**2900**	**B**	52	18	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Selenium	<1.0		1.0	0.61	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Silver	<2.6		2.6	0.67	mg/Kg	☼	03/28/24 08:54	04/03/24 17:33	5
Sodium	**1000**	**B**	100	15	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Thallium	<1.0		1.0	0.52	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Vanadium	**20**		0.52	0.12	mg/Kg	☼	03/28/24 08:54	03/30/24 03:04	1
Zinc	**57**		10	4.6	mg/Kg	☼	03/28/24 08:54	04/03/24 17:33	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		03/27/24 16:45	03/30/24 00:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/27/24 16:45	03/30/24 00:15	1
Manganese	**2.5**		0.025	0.010	mg/L		03/27/24 16:45	03/30/24 00:15	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B01

Date Collected: 03/25/24 09:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-1

Matrix: Solid
Percent Solids: 87.6

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.017**	**J**	0.050	0.010	mg/L		03/27/24 16:50	03/28/24 16:34	1
Barium	**0.37**	**J**	0.50	0.050	mg/L		03/27/24 16:50	04/03/24 15:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/27/24 16:50	03/28/24 16:34	1
Boron	**0.12**		0.10	0.050	mg/L		03/27/24 16:50	03/28/24 16:34	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/27/24 16:50	03/28/24 16:34	1
Calcium	**33**		2.5	0.50	mg/L		03/27/24 16:50	03/28/24 16:34	1
Chromium	**0.062**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:34	1
Cobalt	**0.029**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:34	1
Iron	**81**		0.40	0.20	mg/L		03/27/24 16:50	04/03/24 15:37	1
Lead	**0.068**		0.0075	0.0075	mg/L		03/27/24 16:50	04/03/24 15:37	1
Manganese	**0.59**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:34	1
Nickel	**0.071**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:34	1
Potassium	**32**	**F1**	2.5	0.50	mg/L		03/27/24 16:50	04/03/24 15:37	1
Selenium	<0.050		0.050	0.020	mg/L		03/27/24 16:50	03/28/24 16:34	1
Silver	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/29/24 23:20	1
Zinc	**0.12**	**J**	0.50	0.020	mg/L		03/27/24 16:50	03/28/24 16:34	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		03/27/24 16:50	03/28/24 18:23	1
Thallium	<0.0020	^5+	0.0020	0.0020	mg/L		03/27/24 16:50	03/29/24 15:50	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/02/24 10:55	04/03/24 10:05	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0096	mg/Kg	☼	04/04/24 15:45	04/05/24 09:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.26		0.26	0.13	mg/Kg	☼	03/27/24 11:16	03/27/24 12:59	1
pH (SW846 9045D)	**7.6**		0.2	0.2	SU			04/01/24 15:49	1
Chloride (SW846 9056A)	**580**	**B**	55	6.4	mg/Kg	☼	04/01/24 11:03	04/02/24 22:35	5
Sulfate (SW846 9056A)	**850**		55	11	mg/Kg	☼	04/01/24 11:03	04/02/24 22:35	5

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B02
Date Collected: 03/25/24 09:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-2
Matrix: Solid
Percent Solids: 85.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
1,1,2,2-Tetrachloroethane	<0.0014	*3	0.0014	0.00045	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00060	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
1,1-Dichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
1,2-Dichloropropane	<0.0014		0.0014	0.00036	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00049	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Acetone	<0.014		0.014	0.0061	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Carbon disulfide	<0.0035		0.0035	0.00073	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00039	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00042	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Ethylbenzene	<0.0014		0.0014	0.00067	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00041	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Styrene	<0.0014		0.0014	0.00042	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Toluene	<0.0014		0.0014	0.00035	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00062	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00049	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Trichloroethene	<0.0014		0.0014	0.00047	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Vinyl chloride	<0.0014		0.0014	0.00062	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	03/26/24 15:38	03/29/24 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 134*	*03/26/24 15:38*	*03/29/24 13:01*	*1*
4-Bromofluorobenzene (Surr)	*137*	*3 S1+	*75 - 131*	*03/26/24 15:38*	*03/29/24 13:01*	*1*
Dibromofluoromethane (Surr)	*116*		*75 - 126*	*03/26/24 15:38*	*03/29/24 13:01*	*1*
Toluene-d8 (Surr)	*117*		*75 - 124*	*03/26/24 15:38*	*03/29/24 13:01*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
1,2-Dichlorobenzene	<0.19	*3	0.19	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
1,3-Dichlorobenzene	<0.19	*3	0.19	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
1,4-Dichlorobenzene	<0.19	*3	0.19	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2,2'-oxybis[1-chloropropane]	<0.19	*3	0.19	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1

Client Sample ID: E14-B02
Date Collected: 03/25/24 09:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-2
Matrix: Solid
Percent Solids: 85.5

Method: SW846 8270E - 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	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2,4,6-Trichlorophenol	<0.37		0.37	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2,4-Dichlorophenol	<0.37		0.37	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2,4-Dimethylphenol	<0.37		0.37	0.083	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2,4-Dinitrophenol	<0.74		0.74	0.21	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2-Chloronaphthalene	<0.19		0.19	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2-Chlorophenol	<0.19	*3	0.19	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2-Methylnaphthalene	**0.077**		0.074	0.0074	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2-Methylphenol	<0.19	*3	0.19	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2-Nitroaniline	<0.19		0.19	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
2-Nitrophenol	<0.37		0.37	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
3 & 4 Methylphenol	<0.19	*3	0.19	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.030	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
3-Nitroaniline	<0.37		0.37	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.21	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
4-Chloro-3-methylphenol	<0.37		0.37	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
4-Chloroaniline	<0.74		0.74	0.39	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.048	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
4-Nitroaniline	<0.37		0.37	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
4-Nitrophenol	<0.74		0.74	0.14	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Acenaphthene	**0.021**	**J**	0.037	0.0075	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Acenaphthylene	**0.010**	**J**	0.037	0.0063	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Anthracene	**0.011**	**J**	0.037	0.0075	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Benzo[a]anthracene	**0.018**	**J B**	0.037	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Benzo[a]pyrene	<0.037		0.037	0.036	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Benzo[b]fluoranthene	<0.037		0.037	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Benzo[g,h,i]perylene	**0.020**	**J B**	0.037	0.0080	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Benzo[k]fluoranthene	<0.037		0.037	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Bis(2-chloroethyl)ether	<0.19	*3	0.19	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.14	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Butyl benzyl phthalate	<0.19		0.19	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Carbazole	<0.19		0.19	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Chrysene	**0.029**	**J B**	0.037	0.0097	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Dibenz(a,h)anthracene	<0.037		0.037	0.037	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Dibenzofuran	**0.068**	**J**	0.19	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Diethyl phthalate	<0.19		0.19	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Dimethyl phthalate	<0.19		0.19	0.0080	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Di-n-butyl phthalate	<0.19		0.19	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Di-n-octyl phthalate	<0.37		0.37	0.26	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Fluoranthene	**0.039**		0.037	0.0086	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Fluorene	**0.071**		0.037	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Hexachlorobenzene	<0.074		0.074	0.0071	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Hexachlorobutadiene	<0.19		0.19	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Hexachlorocyclopentadiene	<0.74		0.74	0.39	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Hexachloroethane	<0.19	*3	0.19	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1

Client Sample ID: E14-B02
Date Collected: 03/25/24 09:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-2
Matrix: Solid
Percent Solids: 85.5

Method: SW846 8270E - 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	0.036	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Isophorone	<0.19		0.19	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Naphthalene	**0.018**	**J**	0.037	0.0067	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Nitrobenzene	<0.037		0.037	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
N-Nitrosodi-n-propylamine	<0.074	*3	0.074	0.0073	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.022	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Pentachlorophenol	<0.74		0.74	0.092	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Phenanthrene	**0.11**		0.037	0.0080	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Phenol	<0.19	*3	0.19	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1
Pyrene	**0.031**	**J B**	0.037	0.010	mg/Kg	☼	03/31/24 15:20	04/03/24 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*31 - 143*	*03/31/24 15:20*	*04/03/24 12:32*	*1*
2-Fluorobiphenyl (Surr)	*75*		*43 - 145*	*03/31/24 15:20*	*04/03/24 12:32*	*1*
2-Fluorophenol (Surr)	*54*	*3*	*31 - 166*	*03/31/24 15:20*	*04/03/24 12:32*	*1*
Nitrobenzene-d5 (Surr)	*63*		*37 - 147*	*03/31/24 15:20*	*04/03/24 12:32*	*1*
Phenol-d5 (Surr)	*51*	*3*	*30 - 153*	*03/31/24 15:20*	*04/03/24 12:32*	*1*
Terphenyl-d14 (Surr)	*89*		*42 - 157*	*03/31/24 15:20*	*04/03/24 12:32*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.67**	**J**	2.1	0.41	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Arsenic	**9.1**		1.1	0.36	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Barium	**48**	**B**	1.1	0.12	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Beryllium	**0.83**	**J**	2.1	0.50	mg/Kg	☼	03/28/24 08:54	04/03/24 17:37	5
Boron	**12**	**B**	5.3	0.50	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Cadmium	**0.19**	**J**	0.21	0.038	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Calcium	**31000**		21	3.6	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Chromium	**19**		1.1	0.53	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Cobalt	**16**		0.53	0.14	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Copper	**26**		1.1	0.30	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Iron	**26000**		110	55	mg/Kg	☼	03/28/24 08:54	04/03/24 17:37	5
Lead	**22**		0.53	0.25	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Magnesium	**19000**		53	26	mg/Kg	☼	03/28/24 08:54	04/03/24 17:37	5
Manganese	**360**	**B**	1.1	0.15	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Nickel	**32**		1.1	0.31	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Potassium	**3000**	**B**	53	19	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Selenium	<1.1		1.1	0.63	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Silver	<2.7		2.7	0.69	mg/Kg	☼	03/28/24 08:54	04/03/24 17:37	5
Sodium	**1800**	**B**	110	16	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Thallium	<1.1		1.1	0.53	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Vanadium	**28**		0.53	0.13	mg/Kg	☼	03/28/24 08:54	03/30/24 03:08	1
Zinc	**76**		11	4.7	mg/Kg	☼	03/28/24 08:54	04/03/24 17:37	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.28**	**J**	0.40	0.20	mg/L		03/27/24 16:45	03/30/24 00:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/27/24 16:45	03/30/24 00:32	1
Manganese	**9.3**		0.025	0.010	mg/L		03/27/24 16:45	03/30/24 00:32	1

Client Sample ID: E14-B02

Date Collected: 03/25/24 09:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-2

Matrix: Solid
Percent Solids: 85.5

Method: SW846 6010D - 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		03/27/24 16:50	03/28/24 16:59	1
Barium	**0.33**	**J**	0.50	0.050	mg/L		03/27/24 16:50	04/03/24 16:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/27/24 16:50	03/28/24 16:59	1
Boron	**0.13**		0.10	0.050	mg/L		03/27/24 16:50	03/28/24 16:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/27/24 16:50	03/28/24 16:59	1
Calcium	**25**		2.5	0.50	mg/L		03/27/24 16:50	03/28/24 16:59	1
Chromium	**0.065**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:59	1
Cobalt	**0.027**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:59	1
Iron	**110**		0.40	0.20	mg/L		03/27/24 16:50	04/03/24 16:01	1
Lead	**0.085**		0.0075	0.0075	mg/L		03/27/24 16:50	04/03/24 16:01	1
Manganese	**0.82**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:59	1
Nickel	**0.079**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 16:59	1
Potassium	**32**		2.5	0.50	mg/L		03/27/24 16:50	04/03/24 16:01	1
Selenium	<0.050		0.050	0.020	mg/L		03/27/24 16:50	03/28/24 16:59	1
Silver	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/29/24 23:34	1
Zinc	**0.15**	**J**	0.50	0.020	mg/L		03/27/24 16:50	03/28/24 16:59	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		03/27/24 16:45	04/04/24 16:59	1

Method: SW846 6020B - 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		03/27/24 16:50	03/28/24 18:37	1
Thallium	**0.0021**	**^5+**	0.0020	0.0020	mg/L		03/27/24 16:50	03/29/24 16:03	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/02/24 10:55	04/03/24 10:11	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.028**		0.018	0.0095	mg/Kg	☼	04/04/24 15:45	04/05/24 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.25		0.25	0.13	mg/Kg	☼	03/27/24 11:16	03/27/24 13:00	1
pH (SW846 9045D)	**7.5**		0.2	0.2	SU			04/01/24 15:51	1
Chloride (SW846 9056A)	**1200**	**B**	120	14	mg/Kg	☼	04/01/24 11:03	04/02/24 22:50	10
Sulfate (SW846 9056A)	**730**		120	24	mg/Kg	☼	04/01/24 11:03	04/02/24 22:50	10

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B03
Date Collected: 03/25/24 10:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-3
Matrix: Solid
Percent Solids: 86.8

Method: SW846 8260D - Volatile Organic Compounds by 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	☼	03/26/24 13:58	03/28/24 16:35	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Acetone	**0.020**		0.016	0.0071	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Benzene	**0.00065**	**J**	0.0016	0.00042	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	03/26/24 13:58	03/28/24 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*132*		*70 - 134*	*03/26/24 13:58*	*03/28/24 16:35*	*1*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*75 - 131*	*03/26/24 13:58*	*03/28/24 16:35*	*1*
Dibromofluoromethane (Surr)	*114*		*75 - 126*	*03/26/24 13:58*	*03/28/24 16:35*	*1*
Toluene-d8 (Surr)	*112*		*75 - 124*	*03/26/24 13:58*	*03/28/24 16:35*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
1,2-Dichlorobenzene	<0.18		0.18	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
1,3-Dichlorobenzene	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
1,4-Dichlorobenzene	<0.18		0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1

Client Sample ID: E14-B03
Date Collected: 03/25/24 10:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-3
Matrix: Solid
Percent Solids: 86.8

Method: SW846 8270E - 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	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2,4,6-Trichlorophenol	<0.36		0.36	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2,4-Dichlorophenol	<0.36		0.36	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2,4-Dimethylphenol	<0.36		0.36	0.081	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2,4-Dinitrophenol	<0.73		0.73	0.21	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2,4-Dinitrotoluene	<0.18		0.18	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2,6-Dinitrotoluene	<0.18		0.18	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2-Chloronaphthalene	<0.18		0.18	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2-Chlorophenol	<0.18		0.18	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2-Methylnaphthalene	**0.085**		0.073	0.0073	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2-Methylphenol	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2-Nitroaniline	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
2-Nitrophenol	<0.36		0.36	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
3 & 4 Methylphenol	<0.18		0.18	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.030	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
3-Nitroaniline	<0.36		0.36	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.20	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
4-Chloro-3-methylphenol	<0.36		0.36	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
4-Chloroaniline	<0.73		0.73	0.38	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
4-Nitroaniline	<0.36		0.36	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
4-Nitrophenol	<0.73		0.73	0.13	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Acenaphthene	<0.036		0.036	0.0074	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Acenaphthylene	<0.036		0.036	0.0062	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Anthracene	<0.036		0.036	0.0074	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Benzo[a]anthracene	**0.014**	**J B**	0.036	0.0077	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Benzo[a]pyrene	<0.036		0.036	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Benzo[b]fluoranthene	<0.036		0.036	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Benzo[g,h,i]perylene	**0.026**	**J B**	0.036	0.0079	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Benzo[k]fluoranthene	<0.036		0.036	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.14	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Butyl benzyl phthalate	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Carbazole	<0.18		0.18	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Chrysene	**0.017**	**J B**	0.036	0.0096	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Dibenz(a,h)anthracene	<0.036		0.036	0.036	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Dibenzofuran	**0.015**	**J**	0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Diethyl phthalate	<0.18		0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Dimethyl phthalate	<0.18		0.18	0.0079	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Di-n-butyl phthalate	<0.18		0.18	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Di-n-octyl phthalate	<0.36		0.36	0.25	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Fluoranthene	**0.011**	**J**	0.036	0.0084	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Fluorene	<0.036		0.036	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Hexachlorobenzene	<0.073		0.073	0.0070	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Hexachlorobutadiene	<0.18		0.18	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Hexachlorocyclopentadiene	<0.73		0.73	0.39	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Hexachloroethane	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1

Client Sample ID: E14-B03
Date Collected: 03/25/24 10:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-3
Matrix: Solid
Percent Solids: 86.8

Method: SW846 8270E - 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	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Isophorone	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Naphthalene	**0.026**	**J**	0.036	0.0066	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Nitrobenzene	<0.036		0.036	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.0072	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
N-Nitrosodiphenylamine	<0.18		0.18	0.022	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Pentachlorophenol	<0.73		0.73	0.091	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Phenanthrene	**0.057**		0.036	0.0079	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Phenol	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1
Pyrene	**0.016**	**J B**	0.036	0.0099	mg/Kg	☼	03/31/24 15:20	04/03/24 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*89*		*31 - 143*	*03/31/24 15:20*	*04/03/24 12:57*	*1*
2-Fluorobiphenyl (Surr)	*81*		*43 - 145*	*03/31/24 15:20*	*04/03/24 12:57*	*1*
2-Fluorophenol (Surr)	*83*		*31 - 166*	*03/31/24 15:20*	*04/03/24 12:57*	*1*
Nitrobenzene-d5 (Surr)	*73*		*37 - 147*	*03/31/24 15:20*	*04/03/24 12:57*	*1*
Phenol-d5 (Surr)	*78*		*30 - 153*	*03/31/24 15:20*	*04/03/24 12:57*	*1*
Terphenyl-d14 (Surr)	*88*		*42 - 157*	*03/31/24 15:20*	*04/03/24 12:57*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.79**	**J**	2.0	0.39	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Arsenic	**9.6**		0.99	0.34	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Barium	**43**	**B**	0.99	0.11	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Beryllium	**0.81**	**J**	2.0	0.46	mg/Kg	☼	03/28/24 08:54	04/03/24 17:41	5
Boron	**14**	**B**	5.0	0.46	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Cadmium	**0.21**		0.20	0.036	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Calcium	**50000**		20	3.4	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Chromium	**17**		0.99	0.49	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Cobalt	**15**		0.50	0.13	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Copper	**29**		0.99	0.28	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Iron	**26000**		99	52	mg/Kg	☼	03/28/24 08:54	04/03/24 17:41	5
Lead	**18**		0.50	0.23	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Magnesium	**31000**		50	25	mg/Kg	☼	03/28/24 08:54	04/03/24 17:41	5
Manganese	**360**	**B**	0.99	0.14	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Nickel	**34**		0.99	0.29	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Potassium	**3000**	**B**	50	18	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Selenium	<0.99		0.99	0.58	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Silver	<2.5		2.5	0.64	mg/Kg	☼	03/28/24 08:54	04/03/24 17:41	5
Sodium	**1900**	**B**	99	15	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Thallium	<0.99		0.99	0.49	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Vanadium	**22**		0.50	0.12	mg/Kg	☼	03/28/24 08:54	03/30/24 03:22	1
Zinc	**85**		9.9	4.3	mg/Kg	☼	03/28/24 08:54	04/03/24 17:41	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/27/24 16:45	03/30/24 00:36	1
Chromium	<0.025		0.025	0.010	mg/L		03/27/24 16:45	03/30/24 00:36	1
Iron	**1.0**		0.40	0.20	mg/L		03/27/24 16:45	03/30/24 00:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/27/24 16:45	03/30/24 00:36	1

Client Sample ID: E14-B03
Date Collected: 03/25/24 10:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-3
Matrix: Solid
Percent Solids: 86.8

Method: SW846 6010D - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**2.8**		0.025	0.010	mg/L		03/27/24 16:45	03/30/24 00:36	1
Nickel	**0.032**	**B**	0.030	0.010	mg/L		04/04/24 16:20	04/05/24 12:55	1

Method: SW846 6010D - 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		03/27/24 16:50	03/28/24 17:03	1
Barium	**0.62**		0.50	0.050	mg/L		03/27/24 16:50	04/03/24 16:05	1
Beryllium	**0.0058**		0.0040	0.0040	mg/L		03/27/24 16:50	03/28/24 17:03	1
Boron	**0.36**		0.10	0.050	mg/L		03/27/24 16:50	03/28/24 17:03	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/27/24 16:50	03/28/24 17:03	1
Calcium	**60**		2.5	0.50	mg/L		03/27/24 16:50	03/28/24 17:03	1
Chromium	**0.13**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:03	1
Cobalt	**0.071**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:03	1
Iron	**150**		0.40	0.20	mg/L		03/27/24 16:50	04/03/24 16:05	1
Lead	**0.13**		0.0075	0.0075	mg/L		03/27/24 16:50	04/03/24 16:05	1
Manganese	**1.2**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:03	1
Nickel	**0.17**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:03	1
Potassium	**56**		2.5	0.50	mg/L		03/27/24 16:50	04/03/24 16:05	1
Selenium	<0.050		0.050	0.020	mg/L		03/27/24 16:50	03/28/24 17:03	1
Silver	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/29/24 23:37	1
Zinc	**0.29**	**J**	0.50	0.020	mg/L		03/27/24 16:50	03/28/24 17:03	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^1+	0.0060	0.0060	mg/L		03/27/24 16:50	03/29/24 16:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/27/24 16:50	04/01/24 16:46	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/02/24 10:55	04/03/24 10:13	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.017	0.0090	mg/Kg	☼	04/04/24 15:45	04/05/24 09:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.26		0.26	0.13	mg/Kg	☼	03/27/24 11:16	03/27/24 13:30	1
pH (SW846 9045D)	**7.7**		0.2	0.2	SU			04/01/24 15:54	1
Chloride (SW846 9056A)	**1900**	**B**	120	13	mg/Kg	☼	04/01/24 11:03	04/02/24 23:05	10
Sulfate (SW846 9056A)	**290**		12	2.4	mg/Kg	☼	04/01/24 11:03	04/01/24 22:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B04
Date Collected: 03/25/24 10:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-4
Matrix: Solid
Percent Solids: 90.5

Method: SW846 8260D - Volatile Organic Compounds by 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	☼	03/26/24 13:58	03/28/24 16:59	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Acetone	**0.020**		0.016	0.0070	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	03/26/24 13:58	03/28/24 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 134*	*03/26/24 13:58*	*03/28/24 16:59*	*1*
4-Bromofluorobenzene (Surr)	*114*		*75 - 131*	*03/26/24 13:58*	*03/28/24 16:59*	*1*
Dibromofluoromethane (Surr)	*116*		*75 - 126*	*03/26/24 13:58*	*03/28/24 16:59*	*1*
Toluene-d8 (Surr)	*108*		*75 - 124*	*03/26/24 13:58*	*03/28/24 16:59*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
1,2-Dichlorobenzene	<0.18		0.18	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
1,3-Dichlorobenzene	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
1,4-Dichlorobenzene	<0.18		0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B04
Date Collected: 03/25/24 10:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-4
Matrix: Solid
Percent Solids: 90.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2,4,6-Trichlorophenol	<0.35		0.35	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2,4-Dichlorophenol	<0.35		0.35	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2,4-Dimethylphenol	<0.35		0.35	0.080	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2,4-Dinitrophenol	<0.72		0.72	0.21	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2,4-Dinitrotoluene	<0.18		0.18	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2,6-Dinitrotoluene	<0.18		0.18	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2-Chloronaphthalene	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2-Chlorophenol	<0.18		0.18	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2-Methylnaphthalene	**0.053**	**J**	0.072	0.0072	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2-Methylphenol	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2-Nitroaniline	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
2-Nitrophenol	<0.35		0.35	0.024	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
3 & 4 Methylphenol	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.029	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
3-Nitroaniline	<0.35		0.35	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.20	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.024	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
4-Chloro-3-methylphenol	<0.35		0.35	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
4-Chloroaniline	<0.72		0.72	0.37	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
4-Nitroaniline	<0.35		0.35	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
4-Nitrophenol	<0.72		0.72	0.13	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Acenaphthene	<0.035		0.035	0.0073	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Acenaphthylene	<0.035		0.035	0.0060	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Anthracene	<0.035		0.035	0.0073	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Benzo[a]anthracene	**0.013**	**J B**	0.035	0.0076	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Benzo[a]pyrene	<0.035		0.035	0.034	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Benzo[b]fluoranthene	<0.035		0.035	0.034	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Benzo[g,h,i]perylene	**0.022**	**J B**	0.035	0.0077	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Benzo[k]fluoranthene	<0.035		0.035	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.14	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Butyl benzyl phthalate	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Carbazole	<0.18		0.18	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Chrysene	**0.029**	**J B**	0.035	0.0094	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Dibenz(a,h)anthracene	<0.035		0.035	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Dibenzofuran	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Diethyl phthalate	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Dimethyl phthalate	<0.18		0.18	0.0077	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Di-n-butyl phthalate	<0.18		0.18	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Di-n-octyl phthalate	<0.35		0.35	0.25	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Fluoranthene	**0.027**	**J**	0.035	0.0083	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Fluorene	<0.035		0.035	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Hexachlorobenzene	<0.072		0.072	0.0068	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Hexachlorobutadiene	<0.18		0.18	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Hexachlorocyclopentadiene	<0.72		0.72	0.38	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Hexachloroethane	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B04
Date Collected: 03/25/24 10:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-4
Matrix: Solid
Percent Solids: 90.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Isophorone	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Naphthalene	**0.018**	**J**	0.035	0.0064	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Nitrobenzene	<0.035		0.035	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.0070	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
N-Nitrosodiphenylamine	<0.18		0.18	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Pentachlorophenol	<0.72		0.72	0.089	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Phenanthrene	**0.055**		0.035	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Phenol	<0.18		0.18	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1
Pyrene	**0.028**	**J B**	0.035	0.0097	mg/Kg	☼	03/31/24 15:20	04/03/24 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*31 - 143*	*03/31/24 15:20*	*04/03/24 13:23*	*1*
2-Fluorobiphenyl (Surr)	*77*		*43 - 145*	*03/31/24 15:20*	*04/03/24 13:23*	*1*
2-Fluorophenol (Surr)	*78*		*31 - 166*	*03/31/24 15:20*	*04/03/24 13:23*	*1*
Nitrobenzene-d5 (Surr)	*63*		*37 - 147*	*03/31/24 15:20*	*04/03/24 13:23*	*1*
Phenol-d5 (Surr)	*75*		*30 - 153*	*03/31/24 15:20*	*04/03/24 13:23*	*1*
Terphenyl-d14 (Surr)	*88*		*42 - 157*	*03/31/24 15:20*	*04/03/24 13:23*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.59**	**J**	2.0	0.39	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Arsenic	**5.6**		1.0	0.34	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Barium	**32**		5.0	0.57	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Beryllium	<2.0		2.0	0.47	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Boron	**7.9**	**B**	5.0	0.47	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Cadmium	**0.084**	**J**	0.20	0.036	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Calcium	**120000**	**B**	100	17	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Chromium	**6.9**		1.0	0.50	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Cobalt	**6.4**		0.50	0.13	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Copper	**14**		1.0	0.28	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Iron	**13000**		100	52	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Lead	**8.9**		2.5	1.2	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Magnesium	**64000**		50	25	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Manganese	**360**	**B**	1.0	0.15	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Nickel	**13**		1.0	0.29	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Potassium	**990**		250	89	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Selenium	<1.0		1.0	0.59	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Silver	<2.5		2.5	0.65	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5
Sodium	**1900**	**B**	100	15	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Thallium	<1.0		1.0	0.50	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Vanadium	**14**		0.50	0.12	mg/Kg	☼	03/28/24 08:54	03/30/24 03:26	1
Zinc	**36**		10	4.4	mg/Kg	☼	03/28/24 08:54	04/03/24 17:45	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.8**		0.40	0.20	mg/L		03/27/24 16:45	03/30/24 00:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/27/24 16:45	03/30/24 00:41	1
Manganese	**5.7**		0.025	0.010	mg/L		03/27/24 16:45	03/30/24 00:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B04

Date Collected: 03/25/24 10:30
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-4

Matrix: Solid
Percent Solids: 90.5

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.031**	**J**	0.050	0.010	mg/L		03/27/24 16:50	03/28/24 17:07	1
Barium	**0.60**		0.50	0.050	mg/L		03/27/24 16:50	04/03/24 16:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/27/24 16:50	03/28/24 17:07	1
Boron	**0.12**		0.10	0.050	mg/L		03/27/24 16:50	03/28/24 17:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/27/24 16:50	03/28/24 17:07	1
Calcium	**20**		2.5	0.50	mg/L		03/27/24 16:50	03/28/24 17:07	1
Chromium	**0.059**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:07	1
Cobalt	**0.029**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:07	1
Iron	**130**		0.40	0.20	mg/L		03/27/24 16:50	04/03/24 16:09	1
Lead	**0.10**		0.0075	0.0075	mg/L		03/27/24 16:50	04/03/24 16:09	1
Manganese	**0.67**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:07	1
Nickel	**0.075**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:07	1
Potassium	**29**		2.5	0.50	mg/L		03/27/24 16:50	04/03/24 16:09	1
Selenium	<0.050		0.050	0.020	mg/L		03/27/24 16:50	03/28/24 17:07	1
Silver	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/29/24 23:41	1
Zinc	**0.17**	**J**	0.50	0.020	mg/L		03/27/24 16:50	03/28/24 17:07	1

Method: SW846 6020B - 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		03/27/24 16:50	03/28/24 18:44	1
Thallium	<0.0020	^5+	0.0020	0.0020	mg/L		03/27/24 16:50	03/29/24 16:10	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/02/24 10:55	04/03/24 10:19	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.017	0.0091	mg/Kg	☼	04/04/24 15:45	04/05/24 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.24		0.24	0.12	mg/Kg	☼	03/27/24 11:16	03/27/24 13:31	1
pH (SW846 9045D)	**8.0**		0.2	0.2	SU			04/01/24 15:56	1
Chloride (SW846 9056A)	**2800**	**B**	110	12	mg/Kg	☼	04/01/24 11:03	04/02/24 23:20	10
Sulfate (SW846 9056A)	**34**		11	2.2	mg/Kg	☼	04/01/24 11:03	04/01/24 22:34	1

Client Sample ID: E14-B05
Date Collected: 03/25/24 11:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-5
Matrix: Solid
Percent Solids: 82.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Acetone	**0.010**	**J**	0.015	0.0067	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Bromomethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	03/26/24 13:58	03/28/24 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 134*	*03/26/24 13:58*	*03/28/24 17:24*	*1*
4-Bromofluorobenzene (Surr)	*120*		*75 - 131*	*03/26/24 13:58*	*03/28/24 17:24*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 126*	*03/26/24 13:58*	*03/28/24 17:24*	*1*
Toluene-d8 (Surr)	*111*		*75 - 124*	*03/26/24 13:58*	*03/28/24 17:24*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.39		0.39	0.056	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
1,2-Dichlorobenzene	<0.39		0.39	0.032	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
1,3-Dichlorobenzene	<0.39		0.39	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
1,4-Dichlorobenzene	<0.39		0.39	0.037	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2,2'-oxybis[1-chloropropane]	<0.39		0.39	0.056	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2

Client Sample ID: E14-B05
Date Collected: 03/25/24 11:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-5
Matrix: Solid
Percent Solids: 82.1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.78		0.78	0.029	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2,4,6-Trichlorophenol	<0.78		0.78	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2,4-Dichlorophenol	<0.78		0.78	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2,4-Dimethylphenol	<0.78		0.78	0.17	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2,4-Dinitrophenol	<1.6		1.6	0.45	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2,4-Dinitrotoluene	<0.39		0.39	0.044	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2,6-Dinitrotoluene	<0.39		0.39	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2-Chloronaphthalene	<0.39		0.39	0.029	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2-Chlorophenol	<0.39		0.39	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2-Methylnaphthalene	<0.16		0.16	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2-Methylphenol	<0.39		0.39	0.041	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2-Nitroaniline	<0.39		0.39	0.042	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
2-Nitrophenol	<0.78		0.78	0.053	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
3 & 4 Methylphenol	<0.39		0.39	0.057	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
3,3'-Dichlorobenzidine	<0.39		0.39	0.064	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
3-Nitroaniline	<0.78		0.78	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
4,6-Dinitro-2-methylphenol	<1.6		1.6	0.44	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
4-Bromophenyl phenyl ether	<0.39		0.39	0.053	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
4-Chloro-3-methylphenol	<0.78		0.78	0.030	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
4-Chloroaniline	<1.6		1.6	0.82	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
4-Chlorophenyl phenyl ether	<0.39		0.39	0.10	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
4-Nitroaniline	<0.78		0.78	0.058	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
4-Nitrophenol	<1.6		1.6	0.29	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Acenaphthene	<0.078		0.078	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Acenaphthylene	<0.078		0.078	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Anthracene	**0.020**	**J**	0.078	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Benzo[a]anthracene	**0.083**	**B**	0.078	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Benzo[a]pyrene	**0.093**		0.078	0.075	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Benzo[b]fluoranthene	**0.11**		0.078	0.074	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Benzo[g,h,i]perylene	**0.060**	**J B**	0.078	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Benzo[k]fluoranthene	**0.040**	**J**	0.078	0.030	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Bis(2-chloroethoxy)methane	<0.39		0.39	0.029	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Bis(2-chloroethyl)ether	<0.39		0.39	0.036	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Bis(2-ethylhexyl) phthalate	<0.39		0.39	0.31	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Butyl benzyl phthalate	<0.39		0.39	0.039	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Carbazole	<0.39		0.39	0.031	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Chrysene	**0.090**	**B**	0.078	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Dibenz(a,h)anthracene	<0.078		0.078	0.078	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Dibenzofuran	<0.39		0.39	0.028	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Diethyl phthalate	<0.39		0.39	0.036	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Dimethyl phthalate	<0.39		0.39	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Di-n-butyl phthalate	<0.39		0.39	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Di-n-octyl phthalate	<0.78		0.78	0.55	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Fluoranthene	**0.18**		0.078	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Fluorene	<0.078		0.078	0.023	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Hexachlorobenzene	<0.16		0.16	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Hexachlorobutadiene	<0.39		0.39	0.044	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Hexachlorocyclopentadiene	<1.6		1.6	0.83	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Hexachloroethane	<0.39		0.39	0.039	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B05
Date Collected: 03/25/24 11:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-5
Matrix: Solid
Percent Solids: 82.1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.078		0.078	0.076	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Isophorone	<0.39		0.39	0.040	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Naphthalene	<0.078		0.078	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Nitrobenzene	<0.078		0.078	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
N-Nitrosodi-n-propylamine	<0.16		0.16	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
N-Nitrosodiphenylamine	<0.39		0.39	0.046	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Pentachlorophenol	<1.6		1.6	0.20	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Phenanthrene	**0.087**		0.078	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Phenol	<0.39		0.39	0.034	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2
Pyrene	**0.14**	**B**	0.078	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 15:05	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*31 - 143*	*03/31/24 15:20*	*04/03/24 15:05*	*2*
2-Fluorobiphenyl (Surr)	*73*		*43 - 145*	*03/31/24 15:20*	*04/03/24 15:05*	*2*
2-Fluorophenol (Surr)	*73*		*31 - 166*	*03/31/24 15:20*	*04/03/24 15:05*	*2*
Nitrobenzene-d5 (Surr)	*55*		*37 - 147*	*03/31/24 15:20*	*04/03/24 15:05*	*2*
Phenol-d5 (Surr)	*73*		*30 - 153*	*03/31/24 15:20*	*04/03/24 15:05*	*2*
Terphenyl-d14 (Surr)	*80*		*42 - 157*	*03/31/24 15:20*	*04/03/24 15:05*	*2*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.71**	**J**	2.4	0.47	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Arsenic	**9.1**		1.2	0.41	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Barium	**74**	**B**	1.2	0.14	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Beryllium	**0.92**	**J**	2.4	0.56	mg/Kg	☼	03/28/24 08:54	04/03/24 17:49	5
Boron	**13**	**B**	6.0	0.56	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Cadmium	**0.29**		0.24	0.043	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Calcium	**48000**		24	4.1	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Chromium	**18**		1.2	0.59	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Cobalt	**15**		0.60	0.16	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Copper	**27**		1.2	0.34	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Iron	**26000**		120	62	mg/Kg	☼	03/28/24 08:54	04/03/24 17:49	5
Lead	**19**		0.60	0.28	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Magnesium	**29000**		60	30	mg/Kg	☼	03/28/24 08:54	04/03/24 17:49	5
Manganese	**350**	**B**	1.2	0.17	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Nickel	**32**		1.2	0.35	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Potassium	**2700**		300	110	mg/Kg	☼	03/28/24 08:54	04/03/24 17:49	5
Selenium	<1.2		1.2	0.71	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Silver	<3.0		3.0	0.77	mg/Kg	☼	03/28/24 08:54	04/03/24 17:49	5
Sodium	**2500**	**B**	120	18	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Thallium	<1.2		1.2	0.60	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Vanadium	**27**		0.60	0.14	mg/Kg	☼	03/28/24 08:54	03/30/24 03:30	1
Zinc	**77**		12	5.3	mg/Kg	☼	03/28/24 08:54	04/03/24 17:49	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/27/24 16:45	03/30/24 00:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/27/24 16:45	03/30/24 00:45	1
Iron	**1.5**		0.40	0.20	mg/L		03/27/24 16:45	03/30/24 00:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/27/24 16:45	03/30/24 00:45	1

Client Sample ID: E14-B05
Date Collected: 03/25/24 11:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-5
Matrix: Solid
Percent Solids: 82.1

Method: SW846 6010D - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	5.9		0.025	0.010	mg/L		03/27/24 16:45	03/30/24 00:45	1
Nickel	0.022	J B	0.030	0.010	mg/L		04/04/24 16:20	04/05/24 12:59	1

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.058		0.050	0.010	mg/L		03/27/24 16:50	03/28/24 17:11	1
Barium	0.94		0.50	0.050	mg/L		03/27/24 16:50	04/03/24 16:13	1
Beryllium	0.0049		0.0040	0.0040	mg/L		03/27/24 16:50	03/28/24 17:11	1
Boron	0.14		0.10	0.050	mg/L		03/27/24 16:50	03/28/24 17:11	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/27/24 16:50	03/28/24 17:11	1
Calcium	27		2.5	0.50	mg/L		03/27/24 16:50	03/28/24 17:11	1
Chromium	0.10		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:11	1
Cobalt	0.050		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:11	1
Iron	240		0.40	0.20	mg/L		03/27/24 16:50	04/03/24 16:13	1
Lead	0.24		0.0075	0.0075	mg/L		03/27/24 16:50	04/03/24 16:13	1
Manganese	1.3		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:11	1
Nickel	0.14		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:11	1
Potassium	45		2.5	0.50	mg/L		03/27/24 16:50	04/03/24 16:13	1
Selenium	<0.050		0.050	0.020	mg/L		03/27/24 16:50	03/28/24 17:11	1
Silver	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/29/24 23:44	1
Zinc	0.30	J	0.50	0.020	mg/L		03/27/24 16:50	03/28/24 17:11	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		03/27/24 16:45	04/04/24 17:02	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^1+	0.0060	0.0060	mg/L		03/27/24 16:50	03/29/24 16:20	1
Thallium	0.0025		0.0020	0.0020	mg/L		03/27/24 16:50	04/01/24 16:49	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/02/24 10:55	04/03/24 10:22	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.018	0.0094	mg/Kg	☼	04/04/24 15:45	04/05/24 09:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.26		0.26	0.13	mg/Kg	☼	03/27/24 11:16	03/27/24 13:33	1
pH (SW846 9045D)	7.9		0.2	0.2	SU			04/01/24 15:59	1
Chloride (SW846 9056A)	2400	B	120	14	mg/Kg	☼	04/01/24 11:03	04/02/24 23:35	10
Sulfate (SW846 9056A)	12		12	2.5	mg/Kg	☼	04/01/24 11:03	04/01/24 22:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B07
Date Collected: 03/25/24 12:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-7
Matrix: Solid
Percent Solids: 91.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0013		0.0013	0.00044	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
1,1,2,2-Tetrachloroethane	<0.0013		0.0013	0.00042	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
1,1,2-Trichloroethane	<0.0013		0.0013	0.00056	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
1,1-Dichloroethane	<0.0013		0.0013	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
1,1-Dichloroethene	<0.0013		0.0013	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
1,2-Dichloroethane	<0.0033		0.0033	0.0010	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
1,2-Dichloropropane	<0.0013		0.0013	0.00034	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
1,3-Dichloropropene, Total	<0.0013		0.0013	0.00046	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
2-Butanone (MEK)	<0.0033		0.0033	0.0015	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
2-Hexanone	<0.0033		0.0033	0.0010	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
4-Methyl-2-pentanone (MIBK)	<0.0033		0.0033	0.00097	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Acetone	**0.011**	**J**	0.013	0.0057	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Benzene	<0.0013		0.0013	0.00033	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Bromodichloromethane	<0.0013		0.0013	0.00027	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Bromoform	<0.0013		0.0013	0.00038	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Bromomethane	<0.0033		0.0033	0.0012	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Carbon disulfide	<0.0033		0.0033	0.00068	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Carbon tetrachloride	<0.0013		0.0013	0.00038	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Chlorobenzene	<0.0013		0.0013	0.00048	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Chloroethane	<0.0033		0.0033	0.00097	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Chloroform	<0.0013		0.0013	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Chloromethane	<0.0033		0.0033	0.0013	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
cis-1,2-Dichloroethene	<0.0013		0.0013	0.00037	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
cis-1,3-Dichloropropene	<0.0013		0.0013	0.00039	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Dibromochloromethane	<0.0013		0.0013	0.00043	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Ethylbenzene	<0.0013		0.0013	0.00063	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Methyl tert-butyl ether	<0.0013		0.0013	0.00038	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Methylene Chloride	<0.0033		0.0033	0.0013	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Styrene	<0.0013		0.0013	0.00040	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Tetrachloroethene	<0.0013		0.0013	0.00045	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Toluene	<0.0013		0.0013	0.00033	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
trans-1,2-Dichloroethene	<0.0013		0.0013	0.00058	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
trans-1,3-Dichloropropene	<0.0013		0.0013	0.00046	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Trichloroethene	<0.0013		0.0013	0.00044	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Vinyl chloride	<0.0013		0.0013	0.00058	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1
Xylenes, Total	<0.0026		0.0026	0.00042	mg/Kg	☼	03/26/24 13:58	03/28/24 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 134*	*03/26/24 13:58*	*03/28/24 18:13*	*1*
4-Bromofluorobenzene (Surr)	*114*		*75 - 131*	*03/26/24 13:58*	*03/28/24 18:13*	*1*
Dibromofluoromethane (Surr)	*115*		*75 - 126*	*03/26/24 13:58*	*03/28/24 18:13*	*1*
Toluene-d8 (Surr)	*107*		*75 - 124*	*03/26/24 13:58*	*03/28/24 18:13*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18	F1	0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
1,2-Dichlorobenzene	<0.18	F1	0.18	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
1,3-Dichlorobenzene	<0.18	F1	0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
1,4-Dichlorobenzene	<0.18	F1	0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B07
Date Collected: 03/25/24 12:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-7
Matrix: Solid
Percent Solids: 91.0

Method: SW846 8270E - 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	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2,4,6-Trichlorophenol	<0.36		0.36	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2,4-Dichlorophenol	<0.36		0.36	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2,4-Dimethylphenol	<0.36		0.36	0.080	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2,4-Dinitrophenol	<0.73		0.73	0.21	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2,4-Dinitrotoluene	<0.18		0.18	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2,6-Dinitrotoluene	<0.18		0.18	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2-Chloronaphthalene	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2-Chlorophenol	<0.18		0.18	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2-Methylnaphthalene	<0.073	F1	0.073	0.0072	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2-Methylphenol	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2-Nitroaniline	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
2-Nitrophenol	<0.36		0.36	0.024	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
3 & 4 Methylphenol	<0.18		0.18	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.029	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
3-Nitroaniline	<0.36		0.36	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.20	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.025	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
4-Chloro-3-methylphenol	<0.36		0.36	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
4-Chloroaniline	<0.73		0.73	0.38	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
4-Nitroaniline	<0.36		0.36	0.027	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
4-Nitrophenol	<0.73		0.73	0.13	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Acenaphthene	**0.0075**	**J**	0.036	0.0073	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Acenaphthylene	<0.036		0.036	0.0061	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Anthracene	**0.011**	**J**	0.036	0.0073	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Benzo[a]anthracene	**0.030**	**J B**	0.036	0.0076	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Benzo[a]pyrene	**0.038**		0.036	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Benzo[b]fluoranthene	<0.036		0.036	0.034	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Benzo[g,h,i]perylene	**0.018**	**J F1 B**	0.036	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Benzo[k]fluoranthene	<0.036		0.036	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Bis(2-chloroethoxy)methane	<0.18	F1	0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.14	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Butyl benzyl phthalate	<0.18		0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Carbazole	<0.18		0.18	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Chrysene	**0.029**	**J B**	0.036	0.0095	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Dibenz(a,h)anthracene	<0.036		0.036	0.036	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Dibenzofuran	<0.18		0.18	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Diethyl phthalate	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Dimethyl phthalate	<0.18		0.18	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Di-n-butyl phthalate	<0.18		0.18	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Di-n-octyl phthalate	<0.36		0.36	0.25	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Fluoranthene	**0.070**		0.036	0.0083	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Fluorene	<0.036		0.036	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Hexachlorobenzene	<0.073		0.073	0.0069	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Hexachlorobutadiene	<0.18		0.18	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Hexachlorocyclopentadiene	<0.73	F1	0.73	0.38	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Hexachloroethane	<0.18	F1	0.18	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B07
Date Collected: 03/25/24 12:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-7
Matrix: Solid
Percent Solids: 91.0

Method: SW846 8270E - 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	0.035	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Isophorone	<0.18		0.18	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Naphthalene	<0.036	F1	0.036	0.0065	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Nitrobenzene	<0.036	F1	0.036	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.0071	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
N-Nitrosodiphenylamine	<0.18		0.18	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Pentachlorophenol	<0.73		0.73	0.090	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Phenanthrene	**0.056**		0.036	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Phenol	<0.18		0.18	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1
Pyrene	**0.055**	**B**	0.036	0.0098	mg/Kg	☼	03/31/24 15:20	04/03/24 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*31 - 143*	*03/31/24 15:20*	*04/03/24 16:46*	*1*
2-Fluorobiphenyl (Surr)	*81*		*43 - 145*	*03/31/24 15:20*	*04/03/24 16:46*	*1*
2-Fluorophenol (Surr)	*79*		*31 - 166*	*03/31/24 15:20*	*04/03/24 16:46*	*1*
Nitrobenzene-d5 (Surr)	*72*		*37 - 147*	*03/31/24 15:20*	*04/03/24 16:46*	*1*
Phenol-d5 (Surr)	*77*		*30 - 153*	*03/31/24 15:20*	*04/03/24 16:46*	*1*
Terphenyl-d14 (Surr)	*85*		*42 - 157*	*03/31/24 15:20*	*04/03/24 16:46*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.46**	**J**	1.9	0.36	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Arsenic	**4.7**		0.93	0.32	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Barium	**34**		4.6	0.53	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Beryllium	**0.43**	**J**	1.9	0.43	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Boron	**17**	**B**	4.6	0.43	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Cadmium	**0.050**	**J**	0.19	0.033	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Calcium	**130000**	**B**	93	16	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Chromium	**9.3**		0.93	0.46	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Cobalt	**6.7**		0.46	0.12	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Copper	**11**		0.93	0.26	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Iron	**12000**		93	48	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Lead	**6.3**		2.3	1.1	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Magnesium	**77000**		46	23	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Manganese	**330**	**B**	0.93	0.13	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Nickel	**14**		0.93	0.27	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Potassium	**1900**		230	82	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Selenium	<0.93		0.93	0.55	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Silver	<2.3		2.3	0.60	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5
Sodium	**3000**	**B**	93	14	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Thallium	<0.93		0.93	0.46	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Vanadium	**13**		0.46	0.11	mg/Kg	☼	03/28/24 08:54	03/30/24 03:38	1
Zinc	**29**		9.3	4.1	mg/Kg	☼	03/28/24 08:54	04/03/24 17:57	5

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/27/24 16:50	03/28/24 17:19	1
Barium	<0.50		0.50	0.050	mg/L		03/27/24 16:50	04/03/24 16:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/27/24 16:50	03/28/24 17:19	1
Boron	<0.10		0.10	0.050	mg/L		03/27/24 16:50	03/28/24 17:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B07
Date Collected: 03/25/24 12:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-7
Matrix: Solid
Percent Solids: 91.0

Method: SW846 6010D - 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		03/27/24 16:50	03/28/24 17:19	1
Calcium	**7.5**		2.5	0.50	mg/L		03/27/24 16:50	03/28/24 17:19	1
Chromium	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:19	1
Cobalt	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:19	1
Iron	**0.22**	**J**	0.40	0.20	mg/L		03/27/24 16:50	04/03/24 16:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/27/24 16:50	04/03/24 16:21	1
Manganese	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:19	1
Nickel	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:19	1
Potassium	**1.0**	**J**	2.5	0.50	mg/L		03/27/24 16:50	04/03/24 16:21	1
Selenium	<0.050		0.050	0.020	mg/L		03/27/24 16:50	03/28/24 17:19	1
Silver	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/29/24 23:59	1
Zinc	<0.50		0.50	0.020	mg/L		03/27/24 16:50	03/28/24 17:19	1

Method: SW846 6020B - 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		03/27/24 16:50	03/28/24 19:04	1
Thallium	<0.0020	^5+	0.0020	0.0020	mg/L		03/27/24 16:50	03/29/24 16:27	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/02/24 10:55	04/03/24 10:26	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.017	0.0091	mg/Kg	☼	04/04/24 15:45	04/05/24 09:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.23	F1	0.23	0.12	mg/Kg	☼	03/27/24 11:16	03/27/24 13:36	1
pH (SW846 9045D)	**8.0**		0.2	0.2	SU			04/01/24 16:03	1
Chloride (SW846 9056A)	**2500**	**B**	110	13	mg/Kg	☼	04/01/24 11:03	04/03/24 00:06	10
Sulfate (SW846 9056A)	**140**		11	2.2	mg/Kg	☼	04/01/24 11:03	04/01/24 23:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B13
Date Collected: 03/25/24 14:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-12
Matrix: Solid
Percent Solids: 85.3

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Acetone	**0.0093**	**J**	0.015	0.0067	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	03/26/24 13:58	03/29/24 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 134*	*03/26/24 13:58*	*03/29/24 15:03*	*1*
4-Bromofluorobenzene (Surr)	*113*		*75 - 131*	*03/26/24 13:58*	*03/29/24 15:03*	*1*
Dibromofluoromethane (Surr)	*111*		*75 - 126*	*03/26/24 13:58*	*03/29/24 15:03*	*1*
Toluene-d8 (Surr)	*109*		*75 - 124*	*03/26/24 13:58*	*03/29/24 15:03*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.028	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
1,2-Dichlorobenzene	<0.19		0.19	0.016	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
1,3-Dichlorobenzene	<0.19		0.19	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
1,4-Dichlorobenzene	<0.19		0.19	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.028	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B13
Date Collected: 03/25/24 14:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-12
Matrix: Solid
Percent Solids: 85.3

Method: SW846 8270E - 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	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2,4,6-Trichlorophenol	<0.38		0.38	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2,4-Dichlorophenol	<0.38		0.38	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2,4-Dimethylphenol	<0.38		0.38	0.086	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2,4-Dinitrophenol	<0.78		0.78	0.22	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2,4-Dinitrotoluene	<0.19		0.19	0.022	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2,6-Dinitrotoluene	<0.19		0.19	0.013	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2-Chloronaphthalene	<0.19		0.19	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2-Chlorophenol	<0.19		0.19	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2-Methylnaphthalene	<0.078		0.078	0.0077	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2-Methylphenol	<0.19		0.19	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2-Nitroaniline	<0.19		0.19	0.021	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
2-Nitrophenol	<0.38		0.38	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
3 & 4 Methylphenol	<0.19		0.19	0.028	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.031	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
3-Nitroaniline	<0.38		0.38	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.22	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.026	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
4-Chloro-3-methylphenol	<0.38		0.38	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
4-Chloroaniline	<0.78		0.78	0.40	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
4-Nitroaniline	<0.38		0.38	0.028	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
4-Nitrophenol	<0.78		0.78	0.14	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Acenaphthene	<0.038		0.038	0.0078	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Acenaphthylene	<0.038		0.038	0.0065	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Anthracene	**0.012**	**J**	0.038	0.0079	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Benzo[a]anthracene	**0.045**	**B**	0.038	0.0082	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Benzo[a]pyrene	**0.051**		0.038	0.037	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Benzo[b]fluoranthene	**0.051**		0.038	0.037	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Benzo[g,h,i]perylene	**0.037**	**J B**	0.038	0.0084	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Benzo[k]fluoranthene	**0.018**	**J**	0.038	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.15	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Butyl benzyl phthalate	<0.19		0.19	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Carbazole	<0.19		0.19	0.015	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Chrysene	**0.050**	**B**	0.038	0.010	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Dibenz(a,h)anthracene	<0.038		0.038	0.038	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Dibenzofuran	<0.19		0.19	0.014	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Diethyl phthalate	<0.19		0.19	0.018	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Dimethyl phthalate	<0.19		0.19	0.0084	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Di-n-butyl phthalate	<0.19		0.19	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Di-n-octyl phthalate	<0.38		0.38	0.27	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Fluoranthene	**0.10**		0.038	0.0090	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Fluorene	<0.038		0.038	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Hexachlorobenzene	<0.078		0.078	0.0074	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Hexachlorobutadiene	<0.19		0.19	0.022	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Hexachlorocyclopentadiene	<0.78		0.78	0.41	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Hexachloroethane	<0.19		0.19	0.019	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B13
Date Collected: 03/25/24 14:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-12
Matrix: Solid
Percent Solids: 85.3

Method: SW846 8270E - 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	0.038	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Isophorone	<0.19		0.19	0.020	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Naphthalene	<0.038		0.038	0.0070	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Nitrobenzene	<0.038		0.038	0.012	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.0076	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
N-Nitrosodiphenylamine	<0.19		0.19	0.023	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Pentachlorophenol	<0.78		0.78	0.096	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Phenanthrene	**0.055**		0.038	0.0084	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Phenol	<0.19		0.19	0.017	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1
Pyrene	**0.088**	**B**	0.038	0.011	mg/Kg	☼	03/31/24 15:20	04/03/24 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*31 - 143*	*03/31/24 15:20*	*04/03/24 14:14*	*1*
2-Fluorobiphenyl (Surr)	*76*		*43 - 145*	*03/31/24 15:20*	*04/03/24 14:14*	*1*
2-Fluorophenol (Surr)	*70*		*31 - 166*	*03/31/24 15:20*	*04/03/24 14:14*	*1*
Nitrobenzene-d5 (Surr)	*61*		*37 - 147*	*03/31/24 15:20*	*04/03/24 14:14*	*1*
Phenol-d5 (Surr)	*65*		*30 - 153*	*03/31/24 15:20*	*04/03/24 14:14*	*1*
Terphenyl-d14 (Surr)	*83*		*42 - 157*	*03/31/24 15:20*	*04/03/24 14:14*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.66**	**J**	2.2	0.43	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Arsenic	**8.0**		1.1	0.38	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Barium	**58**	**B**	1.1	0.13	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Beryllium	**0.78**	**J**	2.2	0.51	mg/Kg	☼	03/28/24 08:54	04/03/24 18:26	5
Boron	**14**	**B**	5.5	0.51	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Cadmium	**0.20**	**J**	0.22	0.040	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Calcium	**54000**		22	3.7	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Chromium	**17**		1.1	0.54	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Cobalt	**13**		0.55	0.14	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Copper	**23**		1.1	0.31	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Iron	**23000**		110	57	mg/Kg	☼	03/28/24 08:54	04/03/24 18:26	5
Lead	**16**		0.55	0.25	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Magnesium	**32000**		55	27	mg/Kg	☼	03/28/24 08:54	04/03/24 18:26	5
Manganese	**440**	**B**	1.1	0.16	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Nickel	**28**		1.1	0.32	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Potassium	**3000**	**B**	55	19	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Selenium	<1.1		1.1	0.65	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Silver	<2.8		2.8	0.71	mg/Kg	☼	03/28/24 08:54	04/03/24 18:26	5
Sodium	**940**	**B**	110	16	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Thallium	<1.1		1.1	0.55	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Vanadium	**25**		0.55	0.13	mg/Kg	☼	03/28/24 08:54	03/30/24 03:59	1
Zinc	**65**		11	4.8	mg/Kg	☼	03/28/24 08:54	04/03/24 18:26	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.8**		0.40	0.20	mg/L		03/27/24 16:45	03/30/24 01:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/27/24 16:45	03/30/24 01:25	1
Manganese	**7.8**		0.025	0.010	mg/L		03/27/24 16:45	04/01/24 14:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Client Sample ID: E14-B13
Date Collected: 03/25/24 14:00
Date Received: 03/26/24 11:06

Lab Sample ID: 500-248064-12
Matrix: Solid
Percent Solids: 85.3

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.013**	**J**	0.050	0.010	mg/L		03/27/24 16:50	03/28/24 17:47	1
Barium	**0.18**	**J**	0.50	0.050	mg/L		03/27/24 16:50	04/03/24 16:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/27/24 16:50	04/03/24 16:50	1
Boron	**0.070**	**J**	0.10	0.050	mg/L		03/27/24 16:50	03/30/24 00:17	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/27/24 16:50	03/28/24 17:47	1
Calcium	**19**		2.5	0.50	mg/L		03/27/24 16:50	03/28/24 17:47	1
Chromium	**0.032**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:47	1
Cobalt	**0.011**	**J**	0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:47	1
Iron	**38**		0.40	0.20	mg/L		03/27/24 16:50	04/03/24 16:50	1
Lead	**0.035**		0.0075	0.0075	mg/L		03/27/24 16:50	04/03/24 16:50	1
Manganese	**0.26**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:47	1
Nickel	**0.032**		0.025	0.010	mg/L		03/27/24 16:50	03/28/24 17:47	1
Potassium	**12**		2.5	0.50	mg/L		03/27/24 16:50	04/03/24 16:50	1
Selenium	<0.050		0.050	0.020	mg/L		03/27/24 16:50	03/28/24 17:47	1
Silver	<0.025		0.025	0.010	mg/L		03/27/24 16:50	03/30/24 00:17	1
Zinc	**0.068**	**J B**	0.50	0.020	mg/L		03/27/24 16:50	03/30/24 00:17	1

Method: SW846 6020B - 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		03/27/24 16:50	03/28/24 19:22	1
Thallium	<0.0020	^5+	0.0020	0.0020	mg/L		03/27/24 16:50	03/29/24 16:45	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/02/24 10:55	04/03/24 10:36	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.033**		0.018	0.0096	mg/Kg	☼	04/04/24 15:45	04/05/24 10:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.27		0.27	0.13	mg/Kg	☼	03/28/24 11:22	03/28/24 16:40	1
pH (SW846 9045D)	**7.7**		0.2	0.2	SU			04/01/24 16:18	1
Chloride (SW846 9056A)	**940**	**B**	58	6.8	mg/Kg	☼	04/01/24 13:07	04/03/24 01:52	5
Sulfate (SW846 9056A)	**9.8**	**J**	12	2.4	mg/Kg	☼	04/01/24 13:07	04/02/24 01:06	1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
B	Compound was found in the blank and sample.
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
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^3-	Reporting Limit Check Standard is outside acceptance limits, low biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
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
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248064-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7470A	7470A	Solid	Mercury
8260D	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING

Client Contact	Laboratory
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng com	Lab **Eurofins - Chicago** Address **2417 Bond Street** **University Park, IL 60484** Phone **708-534-5200** Contact **Jodie Bracken** email Jodie Bracken@ET EurofinsUS com

Project Name AE8-025A — 500-248064 COC

Project No PTB/WO#: 195-002/25A

TAT [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other

Sampler: S. Khodaei / S. Radulovic

COC No 1 of 2

Lab Job No.: 500-248064

Sample Temp: 2.5+1.8, 5.0+4.3

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits

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

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

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

Matrix Key:

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Chloride	Sulfate		Comments
1	E14-B01	3/25/24	0900	S	X	X					X	X	X	X	X		X	X		
2	E14-B02		0930																	
3	E14-B03		1000																	
4	E14-B04		1030																	
5	E14-B05		1100																	
6	E14-B06		1130																	
7	E14-B07		1200																	
8	E14-B08		1230																	
9	E14-B09		1300																	
10	E14-B09 DUP		1310																	
11	E14-B10	↓	1330	↓	↓	↓					↓	↓	↓	↓	↓		↓	↓		DUP not collected

Relinquished by	Date/Time 3/26/24	Received by 0900 EETA	Date/Time 3/26/24
Relinquished by EETA	Date/Time 3/26/24 1106	Received by Stephanie Hernandez EETA	Date/Time 3/26/24 1106
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 **Eurofins - Chicago** Address **2417 Bond Street** **University Park, IL 60484** Phone **708-534-5200** Contact **Jodie Bracken** email Jodie Bracken@ET EurofinsUS com	Project Name AE8-025A Project No PTB/WO#: 195-002/25A TAT ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** S. Rhodaei / S. Radulovic

COC No 2 of 2

Lab Job No.: 500-248064

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	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Chloride	Sulfate		Comments
12	EM-B13	3/25/24	1400	S	X	X					X	X	X	X	X		X	X		
13	Trip Blank #1	3/25/24		S	X															

Relinquished by	Date/Time 3/26/24	Received by EETA 0900	Date/Time 3/26/24
Relinquished by EETA	Date/Time 3/26/24 1106	Received by Stephanie Hernandez EETA	Date/Time 3/26/24 1106
Relinquished by	Date/Time	Received by	Date/Time

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/10/2024 4:50:32 PM

JOB DESCRIPTION

IDOT - AE8-025A

JOB NUMBER

500-248127-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

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

Authorization

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Authorized for release by
Jodie Bracken, Project Manager I
Jodie.Bracken@ET.EurofinsUS.com
(708)534-5200

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B15
Date Collected: 03/26/24 10:30
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-4
Matrix: Solid
Percent Solids: 90.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Acetone	<0.014		0.014	0.0062	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Carbon disulfide	<0.0035		0.0035	0.00074	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	03/27/24 16:20	03/29/24 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 134*	*03/27/24 16:20*	*03/29/24 16:42*	*1*
4-Bromofluorobenzene (Surr)	*113*		*75 - 131*	*03/27/24 16:20*	*03/29/24 16:42*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 126*	*03/27/24 16:20*	*03/29/24 16:42*	*1*
Toluene-d8 (Surr)	*112*		*75 - 124*	*03/27/24 16:20*	*03/29/24 16:42*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18	F1	0.18	0.026	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
1,2-Dichlorobenzene	<0.18	F1	0.18	0.015	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
1,3-Dichlorobenzene	<0.18	F1	0.18	0.016	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
1,4-Dichlorobenzene	<0.18	F1	0.18	0.017	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.026	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B15
Date Collected: 03/26/24 10:30
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-4
Matrix: Solid
Percent Solids: 90.6

Method: SW846 8270E - 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	0.014	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2,4,6-Trichlorophenol	<0.36		0.36	0.012	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2,4-Dichlorophenol	<0.36	F1	0.36	0.013	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2,4-Dimethylphenol	<0.36	F1	0.36	0.081	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2,4-Dinitrophenol	<0.73		0.73	0.21	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.021	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2,6-Dinitrotoluene	<0.18	F1	0.18	0.012	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2-Chloronaphthalene	<0.18	F1	0.18	0.014	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2-Chlorophenol	<0.18	F1	0.18	0.012	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2-Methylnaphthalene	<0.073	F1	0.073	0.0073	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2-Methylphenol	<0.18	F1	0.18	0.019	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2-Nitroaniline	<0.18		0.18	0.019	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
2-Nitrophenol	<0.36	F1	0.36	0.025	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
3 & 4 Methylphenol	<0.18	F1	0.18	0.026	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.030	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
3-Nitroaniline	<0.36		0.36	0.016	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.20	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.025	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
4-Chloro-3-methylphenol	<0.36	F1	0.36	0.014	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
4-Chloroaniline	<0.73		0.73	0.38	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
4-Chlorophenyl phenyl ether	<0.18	F1	0.18	0.047	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
4-Nitroaniline	<0.36		0.36	0.027	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
4-Nitrophenol	<0.73		0.73	0.13	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Acenaphthene	<0.036	F1	0.036	0.0074	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Acenaphthylene	<0.036	F1	0.036	0.0061	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Anthracene	<0.036		0.036	0.0074	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Benzo[a]anthracene	**0.019**	**J**	0.036	0.0077	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Benzo[a]pyrene	<0.036		0.036	0.035	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Benzo[b]fluoranthene	<0.036		0.036	0.034	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Benzo[g,h,i]perylene	**0.013**	**J F1**	0.036	0.0078	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Benzo[k]fluoranthene	<0.036		0.036	0.014	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Bis(2-chloroethoxy)methane	<0.18	F1	0.18	0.014	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Bis(2-chloroethyl)ether	<0.18	F1	0.18	0.017	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.14	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Butyl benzyl phthalate	<0.18		0.18	0.018	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Carbazole	<0.18		0.18	0.014	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Chrysene	**0.022**	**J**	0.036	0.0095	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Dibenz(a,h)anthracene	<0.036	F1	0.036	0.036	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Dibenzofuran	<0.18	F1	0.18	0.013	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Diethyl phthalate	<0.18		0.18	0.017	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Dimethyl phthalate	<0.18	F1	0.18	0.0079	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Di-n-butyl phthalate	<0.18		0.18	0.011	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Di-n-octyl phthalate	<0.36		0.36	0.25	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Fluoranthene	**0.028**	**J**	0.036	0.0084	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Fluorene	<0.036		0.036	0.011	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Hexachlorobenzene	<0.073		0.073	0.0069	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Hexachlorobutadiene	<0.18	F1	0.18	0.020	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Hexachlorocyclopentadiene	<0.73	F1	0.73	0.38	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Hexachloroethane	<0.18	F1	0.18	0.018	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B15

Date Collected: 03/26/24 10:30
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-4

Matrix: Solid
Percent Solids: 90.6

Method: SW846 8270E - 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	F1	0.036	0.035	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Isophorone	<0.18	F1	0.18	0.019	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Naphthalene	<0.036	F1	0.036	0.0065	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Nitrobenzene	<0.036	F1	0.036	0.011	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
N-Nitrosodi-n-propylamine	<0.073	F1	0.073	0.0071	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.021	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Pentachlorophenol	<0.73		0.73	0.090	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Phenanthrene	**0.021**	**J**	0.036	0.0079	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Phenol	<0.18	F1	0.18	0.016	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1
Pyrene	**0.025**	**J**	0.036	0.0099	mg/Kg	☼	03/27/24 14:56	03/29/24 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*54*		*31 - 143*	*03/27/24 14:56*	*03/29/24 00:15*	*1*
2-Fluorobiphenyl (Surr)	*56*		*43 - 145*	*03/27/24 14:56*	*03/29/24 00:15*	*1*
2-Fluorophenol (Surr)	*55*		*31 - 166*	*03/27/24 14:56*	*03/29/24 00:15*	*1*
Nitrobenzene-d5 (Surr)	*52*		*37 - 147*	*03/27/24 14:56*	*03/29/24 00:15*	*1*
Phenol-d5 (Surr)	*55*		*30 - 153*	*03/27/24 14:56*	*03/29/24 00:15*	*1*
Terphenyl-d14 (Surr)	*63*		*42 - 157*	*03/27/24 14:56*	*03/29/24 00:15*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Arsenic	**3.9**		1.0	0.35	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Barium	**9.8**		5.1	0.58	mg/Kg	☼	04/01/24 09:51	04/04/24 18:09	5
Beryllium	<2.0		2.0	0.47	mg/Kg	☼	04/01/24 09:51	04/04/24 18:09	5
Boron	**16**		5.1	0.47	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Cadmium	**0.33**	**B**	0.20	0.037	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Calcium	**170000**		100	17	mg/Kg	☼	04/01/24 09:51	04/05/24 12:14	5
Chromium	**7.6**		1.0	0.50	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Cobalt	**5.2**		0.51	0.13	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Copper	**9.2**		1.0	0.28	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Iron	**11000**		100	53	mg/Kg	☼	04/01/24 09:51	04/04/24 18:09	5
Lead	**4.3**		0.51	0.23	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Magnesium	**120000**		51	25	mg/Kg	☼	04/01/24 09:51	04/04/24 18:09	5
Manganese	**270**		1.0	0.15	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Nickel	**10**		1.0	0.30	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Potassium	**1900**	**B**	250	90	mg/Kg	☼	04/01/24 09:51	04/04/24 18:09	5
Selenium	**0.97**	**J**	1.0	0.60	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Silver	<2.5		2.5	0.65	mg/Kg	☼	04/01/24 09:51	04/04/24 18:09	5
Sodium	**1900**		510	75	mg/Kg	☼	04/01/24 09:51	04/04/24 18:09	5
Thallium	<1.0		1.0	0.51	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Vanadium	**9.1**		0.51	0.12	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1
Zinc	**22**		2.0	0.89	mg/Kg	☼	04/01/24 09:51	04/04/24 13:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/24 16:44	04/05/24 12:42	1
Chromium	<0.025		0.025	0.010	mg/L		03/28/24 16:44	03/29/24 18:03	1
Iron	**1.4**		0.40	0.20	mg/L		03/28/24 16:44	03/29/24 18:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/28/24 16:44	03/29/24 18:03	1

Client Sample ID: E14-B15
Date Collected: 03/26/24 10:30
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-4
Matrix: Solid
Percent Solids: 90.6

Method: SW846 6010D - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.74		0.025	0.010	mg/L		03/28/24 16:44	04/05/24 12:42	1
Nickel	0.015	J	0.025	0.010	mg/L		03/28/24 16:44	03/29/24 18:03	1

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.045	J	0.050	0.010	mg/L		03/28/24 16:50	03/30/24 04:45	1
Barium	0.29	J	0.50	0.050	mg/L		03/28/24 16:50	03/30/24 04:45	1
Beryllium	0.0064		0.0040	0.0040	mg/L		03/28/24 16:50	04/03/24 15:34	1
Boron	0.16		0.10	0.050	mg/L		03/28/24 16:50	03/30/24 04:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/24 16:50	03/30/24 04:45	1
Calcium	29		2.5	0.50	mg/L		03/28/24 16:50	03/30/24 04:45	1
Chromium	0.11		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 04:45	1
Cobalt	0.065		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 04:45	1
Iron	150		0.40	0.20	mg/L		03/28/24 16:50	04/03/24 15:34	1
Lead	0.073		0.0075	0.0075	mg/L		03/28/24 16:50	03/30/24 04:45	1
Manganese	0.77		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 04:45	1
Nickel	0.18	B	0.025	0.010	mg/L		03/28/24 16:50	03/30/24 04:45	1
Potassium	38		2.5	0.50	mg/L		03/28/24 16:50	04/04/24 14:23	1
Selenium	<0.050		0.050	0.020	mg/L		03/28/24 16:50	03/30/24 04:45	1
Silver	<0.025		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 04:45	1
Zinc	0.45	J	0.50	0.020	mg/L		03/28/24 16:50	04/03/24 15:34	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/24 16:44	04/09/24 15:13	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^1+	0.0060	0.0060	mg/L		03/28/24 16:50	03/29/24 17:29	1
Thallium	0.0022	^5+	0.0020	0.0020	mg/L		03/28/24 16:50	03/29/24 17:29	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/04/24 11:05	04/05/24 09:52	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0091	mg/Kg	☼	04/05/24 15:25	04/08/24 09:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.24		0.24	0.12	mg/Kg	☼	03/28/24 11:22	03/28/24 16:50	1
pH (SW846 9045D)	8.7		0.2	0.2	SU			04/01/24 16:44	1
Chloride (SW846 9056A)	910	B	110	13	mg/Kg	☼	04/01/24 13:07	04/03/24 02:37	10
Sulfate (SW846 9056A)	66		11	2.2	mg/Kg	☼	04/01/24 13:07	04/02/24 03:07	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B19
Date Collected: 03/26/24 12:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-7
Matrix: Solid
Percent Solids: 88.5

Method: SW846 8260D - Volatile Organic Compounds by 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	☼	03/27/24 16:20	03/29/24 17:55	1
1,1,2,2-Tetrachloroethane	<0.0015	*3	0.0015	0.00047	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Acetone	**0.0070**	**J**	0.015	0.0064	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	03/27/24 16:20	03/29/24 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 134*	*03/27/24 16:20*	*03/29/24 17:55*	*1*
4-Bromofluorobenzene (Surr)	*151*	*3 S1+	*75 - 131*	*03/27/24 16:20*	*03/29/24 17:55*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 126*	*03/27/24 16:20*	*03/29/24 17:55*	*1*
Toluene-d8 (Surr)	*124*		*75 - 124*	*03/27/24 16:20*	*03/29/24 17:55*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.025	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
1,2-Dichlorobenzene	<0.18		0.18	0.015	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
1,3-Dichlorobenzene	<0.18		0.18	0.016	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
1,4-Dichlorobenzene	<0.18		0.18	0.017	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.026	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B19
Date Collected: 03/26/24 12:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-7
Matrix: Solid
Percent Solids: 88.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2,4,6-Trichlorophenol	<0.35		0.35	0.012	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2,4-Dichlorophenol	<0.35		0.35	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2,4-Dimethylphenol	<0.35		0.35	0.080	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2,4-Dinitrophenol	<0.72		0.72	0.21	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2,4-Dinitrotoluene	<0.18		0.18	0.020	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2,6-Dinitrotoluene	<0.18		0.18	0.012	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2-Chloronaphthalene	<0.18		0.18	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2-Chlorophenol	<0.18		0.18	0.012	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2-Methylnaphthalene	**0.023**	**J**	0.072	0.0072	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2-Methylphenol	<0.18		0.18	0.019	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2-Nitroaniline	<0.18		0.18	0.019	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
2-Nitrophenol	<0.35		0.35	0.024	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
3 & 4 Methylphenol	<0.18		0.18	0.026	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.029	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
3-Nitroaniline	<0.35		0.35	0.016	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.20	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.024	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
4-Chloro-3-methylphenol	<0.35		0.35	0.014	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
4-Chloroaniline	<0.72		0.72	0.37	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
4-Nitroaniline	<0.35		0.35	0.026	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
4-Nitrophenol	<0.72		0.72	0.13	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Acenaphthene	<0.035		0.035	0.0073	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Acenaphthylene	<0.035		0.035	0.0061	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Anthracene	<0.035		0.035	0.0073	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Benzo[a]anthracene	**0.011**	**J**	0.035	0.0076	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Benzo[a]pyrene	<0.035		0.035	0.034	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Benzo[b]fluoranthene	<0.035		0.035	0.034	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Benzo[g,h,i]perylene	**0.019**	**J**	0.035	0.0077	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Benzo[k]fluoranthene	<0.035		0.035	0.014	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.016	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.14	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Butyl benzyl phthalate	<0.18		0.18	0.018	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Carbazole	<0.18		0.18	0.014	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Chrysene	**0.014**	**J**	0.035	0.0094	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Dibenz(a,h)anthracene	<0.035		0.035	0.035	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Dibenzofuran	<0.18		0.18	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Diethyl phthalate	<0.18		0.18	0.016	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Dimethyl phthalate	<0.18		0.18	0.0077	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Di-n-butyl phthalate	<0.18		0.18	0.011	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Di-n-octyl phthalate	<0.35		0.35	0.25	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Fluoranthene	<0.035		0.035	0.0083	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Fluorene	<0.035		0.035	0.011	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Hexachlorobenzene	<0.072		0.072	0.0068	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Hexachlorobutadiene	<0.18		0.18	0.020	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Hexachlorocyclopentadiene	<0.72		0.72	0.38	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Hexachloroethane	<0.18		0.18	0.018	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1

Client Sample ID: E14-B19
Date Collected: 03/26/24 12:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-7
Matrix: Solid
Percent Solids: 88.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.035	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Isophorone	<0.18		0.18	0.018	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Naphthalene	<0.035		0.035	0.0064	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Nitrobenzene	<0.035		0.035	0.011	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.0070	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
N-Nitrosodiphenylamine	<0.18		0.18	0.021	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Pentachlorophenol	<0.72		0.72	0.089	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Phenanthrene	**0.032**	**J**	0.035	0.0078	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Phenol	<0.18		0.18	0.015	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1
Pyrene	**0.013**	**J**	0.035	0.0097	mg/Kg	☼	03/27/24 14:56	03/28/24 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*51*		*31 - 143*	*03/27/24 14:56*	*03/28/24 18:24*	*1*
2-Fluorobiphenyl (Surr)	*53*		*43 - 145*	*03/27/24 14:56*	*03/28/24 18:24*	*1*
2-Fluorophenol (Surr)	*53*		*31 - 166*	*03/27/24 14:56*	*03/28/24 18:24*	*1*
Nitrobenzene-d5 (Surr)	*49*		*37 - 147*	*03/27/24 14:56*	*03/28/24 18:24*	*1*
Phenol-d5 (Surr)	*52*		*30 - 153*	*03/27/24 14:56*	*03/28/24 18:24*	*1*
Terphenyl-d14 (Surr)	*64*		*42 - 157*	*03/27/24 14:56*	*03/28/24 18:24*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.52**	**J**	2.0	0.40	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Arsenic	**9.4**		1.0	0.35	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Barium	**57**		1.0	0.12	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Beryllium	**0.75**		0.41	0.096	mg/Kg	☼	04/01/24 09:51	04/04/24 18:21	1
Boron	**11**		5.1	0.48	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Cadmium	**0.53**	**B**	0.20	0.037	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Calcium	**39000**		20	3.5	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Chromium	**17**		1.0	0.51	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Cobalt	**13**		0.51	0.13	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Copper	**26**		1.0	0.29	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Iron	**20000**		20	11	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Lead	**21**		0.51	0.24	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Magnesium	**19000**		10	5.1	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Manganese	**360**		1.0	0.15	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Nickel	**29**		1.0	0.30	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Potassium	**2700**	**B**	51	18	mg/Kg	☼	04/01/24 09:51	04/04/24 18:21	1
Selenium	<1.0		1.0	0.60	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Silver	**0.70**		0.51	0.13	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Sodium	**1100**		100	15	mg/Kg	☼	04/01/24 09:51	04/04/24 18:21	1
Thallium	<1.0		1.0	0.51	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Vanadium	**23**		0.51	0.12	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1
Zinc	**63**		2.0	0.90	mg/Kg	☼	04/01/24 09:51	04/04/24 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.34**		0.20	0.20	mg/L		03/28/24 16:44	03/29/24 18:16	1
Manganese	**10**		0.025	0.010	mg/L		03/28/24 16:44	04/05/24 13:03	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B19

Date Collected: 03/26/24 12:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-7

Matrix: Solid
Percent Solids: 88.5

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/28/24 16:50	03/30/24 05:06	1
Barium	**0.11**	**J**	0.50	0.050	mg/L		03/28/24 16:50	03/30/24 05:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/24 16:50	04/03/24 15:46	1
Boron	**0.11**		0.10	0.050	mg/L		03/28/24 16:50	03/30/24 05:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/24 16:50	03/30/24 05:06	1
Calcium	**29**		2.5	0.50	mg/L		03/28/24 16:50	03/30/24 05:06	1
Chromium	**0.025**		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:06	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:06	1
Iron	**15**		0.40	0.20	mg/L		03/28/24 16:50	04/03/24 15:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/28/24 16:50	03/30/24 05:06	1
Manganese	**0.29**		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:06	1
Nickel	**0.051**	**B**	0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:06	1
Potassium	**11**		2.5	0.50	mg/L		03/28/24 16:50	04/04/24 14:35	1
Selenium	<0.050		0.050	0.020	mg/L		03/28/24 16:50	03/30/24 05:06	1
Silver	<0.025		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:06	1
Zinc	**0.035**	**J**	0.50	0.020	mg/L		03/28/24 16:50	04/03/24 15:46	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^1+	0.0060	0.0060	mg/L		03/28/24 16:50	03/29/24 17:40	1
Thallium	<0.0020	^5+	0.0020	0.0020	mg/L		03/28/24 16:50	03/29/24 17:40	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/04/24 11:05	04/05/24 09:58	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.029**		0.018	0.0097	mg/Kg	☼	04/05/24 15:25	04/08/24 09:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.25		0.25	0.12	mg/Kg	☼	03/28/24 11:22	03/28/24 16:55	1
pH (SW846 9045D)	**8.2**		0.2	0.2	SU			04/01/24 16:52	1
Chloride (SW846 9056A)	**270**	**B**	11	1.3	mg/Kg	☼	04/01/24 13:07	04/02/24 04:08	1
Sulfate (SW846 9056A)	**33**		11	2.3	mg/Kg	☼	04/01/24 13:07	04/02/24 04:08	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B18
Date Collected: 03/26/24 13:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-10
Matrix: Solid
Percent Solids: 83.6

Method: SW846 8260D - Volatile Organic Compounds by 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	☼	03/27/24 16:20	03/29/24 19:09	1
1,1,2,2-Tetrachloroethane	<0.0016	*3	0.0016	0.00053	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00071	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Acetone	**0.012**	**J**	0.016	0.0072	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Toluene	<0.0016		0.0016	0.00042	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	03/27/24 16:20	03/29/24 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 134*	*03/27/24 16:20*	*03/29/24 19:09*	*1*
4-Bromofluorobenzene (Surr)	*170*	*3 S1+	*75 - 131*	*03/27/24 16:20*	*03/29/24 19:09*	*1*
Dibromofluoromethane (Surr)	*114*		*75 - 126*	*03/27/24 16:20*	*03/29/24 19:09*	*1*
Toluene-d8 (Surr)	*125*	*S1+	*75 - 124*	*03/27/24 16:20*	*03/29/24 19:09*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.027	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
1,2-Dichlorobenzene	<0.19		0.19	0.015	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.017	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.018	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.027	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B18
Date Collected: 03/26/24 13:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-10
Matrix: Solid
Percent Solids: 83.6

Method: SW846 8270E - 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	0.014	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2,4,6-Trichlorophenol	<0.37		0.37	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2,4-Dichlorophenol	<0.37		0.37	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2,4-Dimethylphenol	<0.37		0.37	0.084	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2,4-Dinitrophenol	<0.76		0.76	0.22	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.021	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2-Chloronaphthalene	<0.19		0.19	0.014	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2-Chlorophenol	<0.19		0.19	0.012	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2-Methylnaphthalene	**0.015**	**J**	0.076	0.0075	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2-Methylphenol	<0.19		0.19	0.020	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2-Nitroaniline	<0.19		0.19	0.020	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
2-Nitrophenol	<0.37		0.37	0.025	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
3 & 4 Methylphenol	<0.19		0.19	0.027	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.031	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
3-Nitroaniline	<0.37		0.37	0.017	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.21	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.026	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
4-Chloro-3-methylphenol	<0.37		0.37	0.015	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
4-Chloroaniline	<0.76		0.76	0.39	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
4-Nitroaniline	<0.37		0.37	0.028	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
4-Nitrophenol	<0.76		0.76	0.14	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Acenaphthene	**0.0086**	**J**	0.037	0.0076	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Acenaphthylene	<0.037		0.037	0.0064	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Anthracene	**0.013**	**J**	0.037	0.0077	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Benzo[a]anthracene	**0.042**		0.037	0.0080	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Benzo[a]pyrene	<0.037		0.037	0.036	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Benzo[b]fluoranthene	<0.037		0.037	0.036	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Benzo[g,h,i]perylene	<0.037		0.037	0.0081	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Benzo[k]fluoranthene	<0.037		0.037	0.014	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.014	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.017	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.15	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Butyl benzyl phthalate	<0.19		0.19	0.019	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Carbazole	<0.19		0.19	0.015	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Chrysene	**0.069**		0.037	0.0099	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Dibenz(a,h)anthracene	<0.037		0.037	0.037	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Dibenzofuran	<0.19		0.19	0.013	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Diethyl phthalate	<0.19		0.19	0.017	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Dimethyl phthalate	<0.19		0.19	0.0081	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Di-n-butyl phthalate	<0.19		0.19	0.012	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Di-n-octyl phthalate	<0.37		0.37	0.26	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Fluoranthene	**0.023**	**J**	0.037	0.0087	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Fluorene	<0.037		0.037	0.011	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Hexachlorobenzene	<0.076		0.076	0.0072	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Hexachlorobutadiene	<0.19		0.19	0.021	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Hexachlorocyclopentadiene	<0.76		0.76	0.40	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Hexachloroethane	<0.19		0.19	0.019	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B18
Date Collected: 03/26/24 13:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-10
Matrix: Solid
Percent Solids: 83.6

Method: SW846 8270E - 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	0.036	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Isophorone	<0.19		0.19	0.019	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Naphthalene	<0.037		0.037	0.0068	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Nitrobenzene	<0.037		0.037	0.012	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.0074	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.022	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Pentachlorophenol	<0.76		0.76	0.094	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Phenanthrene	**0.026**	**J**	0.037	0.0082	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Phenol	<0.19		0.19	0.016	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1
Pyrene	**0.077**		0.037	0.010	mg/Kg	☼	03/27/24 14:56	03/28/24 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*55*		*31 - 143*	*03/27/24 14:56*	*03/28/24 18:49*	*1*
2-Fluorobiphenyl (Surr)	*57*		*43 - 145*	*03/27/24 14:56*	*03/28/24 18:49*	*1*
2-Fluorophenol (Surr)	*53*		*31 - 166*	*03/27/24 14:56*	*03/28/24 18:49*	*1*
Nitrobenzene-d5 (Surr)	*51*		*37 - 147*	*03/27/24 14:56*	*03/28/24 18:49*	*1*
Phenol-d5 (Surr)	*53*		*30 - 153*	*03/27/24 14:56*	*03/28/24 18:49*	*1*
Terphenyl-d14 (Surr)	*62*		*42 - 157*	*03/27/24 14:56*	*03/28/24 18:49*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.2		2.2	0.43	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Arsenic	**8.6**		1.1	0.37	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Barium	**52**		1.1	0.12	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Beryllium	**0.76**		0.44	0.10	mg/Kg	☼	04/01/24 09:51	04/04/24 18:34	1
Boron	**14**		5.5	0.51	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Cadmium	**0.48**	**B**	0.22	0.039	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Calcium	**60000**		22	3.7	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Chromium	**18**		1.1	0.54	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Cobalt	**13**		0.55	0.14	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Copper	**27**		1.1	0.31	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Iron	**22000**		22	11	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Lead	**14**		0.55	0.25	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Magnesium	**27000**		11	5.4	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Manganese	**440**		1.1	0.16	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Nickel	**31**		1.1	0.32	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Potassium	**3300**	**B**	55	19	mg/Kg	☼	04/01/24 09:51	04/04/24 18:34	1
Selenium	<1.1		1.1	0.64	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Silver	**0.94**		0.55	0.14	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Sodium	**1400**		110	16	mg/Kg	☼	04/01/24 09:51	04/04/24 18:34	1
Thallium	<1.1		1.1	0.55	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Vanadium	**22**		0.55	0.13	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1
Zinc	**57**		2.2	0.96	mg/Kg	☼	04/01/24 09:51	04/04/24 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/24 16:44	04/05/24 13:15	1
Iron	**0.69**		0.40	0.20	mg/L		03/28/24 16:44	03/29/24 18:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/28/24 16:44	03/29/24 18:29	1
Manganese	**5.5**		0.025	0.010	mg/L		03/28/24 16:44	04/05/24 13:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Client Sample ID: E14-B18

Date Collected: 03/26/24 13:00
Date Received: 03/27/24 10:57

Lab Sample ID: 500-248127-10

Matrix: Solid
Percent Solids: 83.6

Method: SW846 6010D - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		03/28/24 16:44	03/29/24 18:29	1

Method: SW846 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.034**	**J**	0.050	0.010	mg/L		03/28/24 16:50	03/30/24 05:19	1
Barium	**0.40**	**J**	0.50	0.050	mg/L		03/28/24 16:50	03/30/24 05:19	1
Beryllium	**0.0074**		0.0040	0.0040	mg/L		03/28/24 16:50	04/03/24 15:58	1
Boron	**0.14**		0.10	0.050	mg/L		03/28/24 16:50	03/30/24 05:19	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/24 16:50	03/30/24 05:19	1
Calcium	**35**		2.5	0.50	mg/L		03/28/24 16:50	03/30/24 05:19	1
Chromium	**0.093**		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:19	1
Cobalt	**0.048**		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:19	1
Iron	**150**		0.40	0.20	mg/L		03/28/24 16:50	04/03/24 15:58	1
Lead	**0.049**		0.0075	0.0075	mg/L		03/28/24 16:50	03/30/24 05:19	1
Manganese	**1.3**		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:19	1
Nickel	**0.13**	**B**	0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:19	1
Potassium	**36**		2.5	0.50	mg/L		03/28/24 16:50	04/04/24 14:49	1
Selenium	<0.050		0.050	0.020	mg/L		03/28/24 16:50	03/30/24 05:19	1
Silver	<0.025		0.025	0.010	mg/L		03/28/24 16:50	03/30/24 05:19	1
Zinc	**0.38**	**J**	0.50	0.020	mg/L		03/28/24 16:50	04/03/24 15:58	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/24 16:44	04/09/24 15:22	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^1+	0.0060	0.0060	mg/L		03/28/24 16:50	03/29/24 17:50	1
Thallium	**0.0026**		0.0020	0.0020	mg/L		03/28/24 16:50	04/02/24 14:27	1

Method: SW846 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/04/24 11:05	04/05/24 10:05	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.018	0.0097	mg/Kg	☼	04/05/24 15:25	04/08/24 09:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**1.8**		0.25	0.12	mg/Kg	☼	03/28/24 11:22	03/28/24 17:04	1
pH (SW846 9045D)	**7.4**		0.2	0.2	SU			04/01/24 17:01	1
Chloride (SW846 9056A)	**1400**	**B**	120	14	mg/Kg	☼	04/01/24 13:07	04/03/24 04:53	10
Sulfate (SW846 9056A)	**57**		12	2.4	mg/Kg	☼	04/01/24 13:07	04/02/24 04:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
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
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
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
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
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.
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-025A

Job ID: 500-248127-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7470A	7470A	Solid	Mercury
8260D	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

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	**Eurofins - Chicago**
	Address	**2417 Bond Street** **University Park, IL 60484**
	Phone	**708-534-5200**
	Contact	**Jodie Bracken**
	email	Jodie Bracken@ET EurofinsUS.com

Project Name AE8-025A 500-248127 COC

Project No PTB/WO#195-002/25A

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

Sampler: S. Khodaei [redacted]

COC No 1 of 1

Lab Job No.: 500-248127

Sample Temp: 1.9+0.3, 2.9+2.2

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	Chloride	Sulfate		Comments
1	E14-B11	3/26/24	0900	S	X	X					X	X	X	X	X		X	X		
2	E14-B12	↓	0930	↓	↓	↓					↓	↓	↓	↓	↓		↓	↓		
3	E14-B14		1000																	
4	E14-B15		1030																	
5	E14-B16		1100																	
6	E14-B17		1130																	
7	E14-B19		1200																	
8	E14-B20		1230																	
9	E14-B20 DUP		1240																	
10	E14-B18		1300			↓					↓	↓	↓	↓	↓		↓	↓		
11	Trip Blank-Z	↓		↓	↓															

Relinquished by [redacted]	Date/Time 3/27/24 10:00	Received by [redacted] EETA	Date/Time 3/27/24 10:00
Relinquished by [redacted] EETA 3/27/24	Date/Time 1057	Received by Stephanie Hernandez EETA	Date/Time 3/27/24 1057
Relinquished by	Date/Time	Received by	Date/Time