



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: FAU 3887 (IL 31) Office Phone Number, if available: _____

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

200 block of South La Fox Street (southwest and southeast quadrants of La Fox Street and Plum Street)

City: South Elgin State: IL Zip Code: 60177

County: Kane Township: Elgin

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

Latitude: 41.99142 Longitude: -88.29711
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

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

Estimated Volume of debris (cu. Yd.): 280

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 3331V-4-B01, 3331V-4-B02, 3331V-4-B03 AND 3331V-4-B05 WERE SAMPLED ADJACENT TO SITE 3331V-4. SEE TABLE 3 AND FIGURE 2 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBER: 500-220577-1.

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

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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

Savo Radulovic
Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Oct 19, 2022
Date:



The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

**ISGS Site 3331V-4
Stream**

Sample ID	3331V-4-B01-1	3331V-4-B01-2	3331V-4-B02-1	3331V-4-B02-2	3331V-4-B03-1	Maximum Allowable Concentration				
Sample Depth (ft)	0-6.5	6.5-13	0-6.5	6.5-13	0-6.5	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area
Sample Date	8/8/2022	8/8/2022	8/8/2022	8/8/2022	8/8/2022					
PID	0	0	0	0	0					
Sample pH	8.2	7.8	8.3	8.6	7.9					
Matrix	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.										

Sample ID	3331V-4-B03-2	3331V-4-B05-1	3331V-4-B05-2	3331V-4-B05-2 DUP	Maximum Allowable Concentration					
Sample Depth (ft)	6.5-13	0-6.5	6.5-13	6.5-13	¹ Most Stringent	² Outside a Populated Area	³ Within a Populated non-Metropolitan Statistical Area	⁴ Within Chicago Corporate Limits	⁵ Within a Metropolitan Statistical Area	
Sample Date	8/8/2022	8/8/2022	8/8/2022	8/8/2022						
PID	0	0	0	0						
Sample pH	8	7.7	7.3	7.5						
Matrix	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.										

ANALYTICAL REPORT

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

Laboratory Job ID: 500-220577-1
Client Project/Site: IDOT - AE8-001

For:

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

Attn: Ms. Colleen Grey



Authorized for release by:
8/23/2022 2:05:07 PM

Richard Wright, Senior Project Manager
(708)746-0045

Richard.Wright@et.eurofinsus.com

LINKS

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results through



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-1

Lab Sample ID: 500-220577-1

Date Collected: 08/08/22 09:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
1,1,2-Trichloroethane	<0.0014	*+	0.0014	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Acetone	<0.014	*1	0.014	0.0062	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Bromomethane	<0.0036		0.0036	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Carbon disulfide	<0.0036		0.0036	0.00074	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Styrene	<0.0014	*+	0.0014	0.00043	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Toluene	0.00063	J	0.0014	0.00036	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1
Xylenes, Total	<0.0028		0.0028	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 134	08/09/22 17:24	08/16/22 19:02	1
4-Bromofluorobenzene (Surr)	99		75 - 131	08/09/22 17:24	08/16/22 19:02	1
Dibromofluoromethane	111		75 - 126	08/09/22 17:24	08/16/22 19:02	1
Toluene-d8 (Surr)	120		75 - 124	08/09/22 17:24	08/16/22 19:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1

Eurofins Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-1

Lab Sample ID: 500-220577-1

Date Collected: 08/08/22 09:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2-Chlorophenol	<0.19	+	0.19	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Anthracene	<0.037	+	0.037	0.0062	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Di-n-butyl phthalate	<0.19	+	0.19	0.057	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1
Hexachloroethane	<0.19	+	0.19	0.057	mg/Kg	☼	08/19/22 08:17	08/22/22 20:25	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-1

Lab Sample ID: 500-220577-1

Date Collected: 08/08/22 09:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Isophorone	<0.19		0.19	0.042	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
N-Nitrosodiphenylamine	<0.19	*+	0.19	0.044	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Phenol	<0.19		0.19	0.083	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	✳	08/19/22 08:17	08/22/22 20:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	129		31 - 143				08/19/22 08:17	08/22/22 20:25	1
2-Fluorobiphenyl	68		43 - 145				08/19/22 08:17	08/22/22 20:25	1
2-Fluorophenol	92		31 - 166				08/19/22 08:17	08/22/22 20:25	1
Nitrobenzene-d5 (Surr)	53		37 - 147				08/19/22 08:17	08/22/22 20:25	1
Phenol-d5	114		30 - 153				08/19/22 08:17	08/22/22 20:25	1
Terphenyl-d14 (Surr)	117		42 - 157				08/19/22 08:17	08/22/22 20:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J F1	1.1	0.22	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Arsenic	3.4		0.56	0.19	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Barium	23		0.56	0.064	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Beryllium	0.37		0.23	0.053	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Boron	5.2	B	2.8	0.26	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Cadmium	0.027	J B	0.11	0.020	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Calcium	65000	B	56	9.5	mg/Kg	✳	08/16/22 09:54	08/18/22 15:37	5
Chromium	8.0		0.56	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Cobalt	5.9		0.28	0.074	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Copper	12		0.56	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Iron	9900		11	5.9	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Lead	5.9		0.28	0.13	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Magnesium	28000	B	5.6	2.8	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Manganese	230		0.56	0.082	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Nickel	13		0.56	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Potassium	950	F1	28	10	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Selenium	<0.56	F1	0.56	0.33	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Silver	0.18	J	0.28	0.073	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Sodium	330		56	8.3	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Thallium	<0.56		0.56	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Vanadium	13		0.28	0.066	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1
Zinc	30		1.1	0.49	mg/Kg	✳	08/16/22 09:54	08/17/22 15:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 17:48	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 17:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/17/22 17:48	1
Manganese	0.70		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 17:48	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-1

Lab Sample ID: 500-220577-1

Date Collected: 08/08/22 09:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 17:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.036	J	0.050	0.010	mg/L		08/16/22 17:20	08/17/22 12:56	1
Barium	0.42	J	0.50	0.050	mg/L		08/16/22 17:20	08/17/22 12:56	1
Beryllium	0.0047		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 12:56	1
Boron	0.14		0.10	0.050	mg/L		08/16/22 17:20	08/17/22 12:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 12:56	1
Calcium	36		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 12:56	1
Chromium	0.10		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:56	1
Cobalt	0.030		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:56	1
Iron	100		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 12:56	1
Lead	0.035		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 12:56	1
Manganese	0.71		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:56	1
Nickel	0.11	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:56	1
Potassium	30		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 12:56	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 12:56	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:56	1
Zinc	0.27	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 14:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	B	0.018	0.0060	mg/Kg	✱	08/17/22 15:25	08/18/22 13:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.26		0.26	0.13	mg/Kg	✱	08/12/22 09:42	08/12/22 18:46	1
pH	8.2		0.2	0.2	SU			08/11/22 20:22	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-2

Lab Sample ID: 500-220577-2

Date Collected: 08/08/22 09:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
1,1,2-Trichloroethane	<0.0017	*+	0.0017	0.00071	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Acetone	<0.017	*1	0.017	0.0072	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Styrene	<0.0017	*+	0.0017	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 134	08/09/22 17:24	08/16/22 19:26	1
4-Bromofluorobenzene (Surr)	103		75 - 131	08/09/22 17:24	08/16/22 19:26	1
Dibromofluoromethane	110		75 - 126	08/09/22 17:24	08/16/22 19:26	1
Toluene-d8 (Surr)	116		75 - 124	08/09/22 17:24	08/16/22 19:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-2

Lab Sample ID: 500-220577-2

Date Collected: 08/08/22 09:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2-Chlorophenol	<0.19	+	0.19	0.065	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Anthracene	<0.038	+	0.038	0.0064	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Di-n-butyl phthalate	<0.19	+	0.19	0.058	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1
Hexachloroethane	<0.19	+	0.19	0.058	mg/Kg	☼	08/19/22 08:17	08/22/22 20:46	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-2

Lab Sample ID: 500-220577-2

Date Collected: 08/08/22 09:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
N-Nitrosodiphenylamine	<0.19	*+	0.19	0.045	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Phenol	<0.19		0.19	0.085	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	✳	08/19/22 08:17	08/22/22 20:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	116		31 - 143				08/19/22 08:17	08/22/22 20:46	1
2-Fluorobiphenyl	74		43 - 145				08/19/22 08:17	08/22/22 20:46	1
2-Fluorophenol	97		31 - 166				08/19/22 08:17	08/22/22 20:46	1
Nitrobenzene-d5 (Surr)	57		37 - 147				08/19/22 08:17	08/22/22 20:46	1
Phenol-d5	112		30 - 153				08/19/22 08:17	08/22/22 20:46	1
Terphenyl-d14 (Surr)	107		42 - 157				08/19/22 08:17	08/22/22 20:46	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.21	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Arsenic	5.5		0.54	0.19	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Barium	29		0.54	0.062	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Beryllium	0.51		0.22	0.051	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Boron	6.6	B	2.7	0.25	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Cadmium	<0.11		0.11	0.020	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Calcium	80000	B	54	9.2	mg/Kg	✳	08/16/22 09:54	08/18/22 15:53	5
Chromium	11		0.54	0.27	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Cobalt	11		0.27	0.071	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Copper	13		0.54	0.15	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Iron	13000		11	5.7	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Lead	6.6		0.27	0.13	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Magnesium	30000	B	5.4	2.7	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Manganese	360		0.54	0.079	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Nickel	23		0.54	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Potassium	1400		27	9.6	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Selenium	<0.54		0.54	0.32	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Silver	0.23	J	0.27	0.070	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Sodium	540		54	8.1	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Thallium	<0.54		0.54	0.27	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Vanadium	15		0.27	0.064	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1
Zinc	32		1.1	0.48	mg/Kg	✳	08/16/22 09:54	08/17/22 15:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 17:52	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 17:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/17/22 17:52	1
Manganese	0.95		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 17:52	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B01-2

Lab Sample ID: 500-220577-2

Date Collected: 08/08/22 09:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.044	J	0.050	0.010	mg/L		08/16/22 17:20	08/17/22 12:59	1
Barium	0.39	J	0.50	0.050	mg/L		08/16/22 17:20	08/17/22 12:59	1
Beryllium	0.0050		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 12:59	1
Boron	0.14		0.10	0.050	mg/L		08/16/22 17:20	08/17/22 12:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 12:59	1
Calcium	55		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 12:59	1
Chromium	0.10		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:59	1
Cobalt	0.031		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:59	1
Iron	110		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 12:59	1
Lead	0.039		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 12:59	1
Manganese	0.71		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:59	1
Nickel	0.10	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:59	1
Potassium	26		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 12:59	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 12:59	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 12:59	1
Zinc	0.22	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 12:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 14:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 14:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029	B	0.019	0.0064	mg/Kg	⊛	08/17/22 15:25	08/18/22 13:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.25		0.25	0.12	mg/Kg	⊛	08/12/22 09:42	08/12/22 18:48	1
pH	7.8		0.2	0.2	SU			08/11/22 20:27	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-1

Lab Sample ID: 500-220577-3

Date Collected: 08/08/22 10:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
1,1,2-Trichloroethane	<0.0014	*+	0.0014	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Acetone	<0.014	*1	0.014	0.0062	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Carbon disulfide	<0.0035		0.0035	0.00074	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Styrene	<0.0014	*+	0.0014	0.00043	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 134	08/09/22 17:24	08/16/22 19:50	1
4-Bromofluorobenzene (Surr)	97		75 - 131	08/09/22 17:24	08/16/22 19:50	1
Dibromofluoromethane	109		75 - 126	08/09/22 17:24	08/16/22 19:50	1
Toluene-d8 (Surr)	118		75 - 124	08/09/22 17:24	08/16/22 19:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-1

Lab Sample ID: 500-220577-3

Date Collected: 08/08/22 10:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2-Chlorophenol	<0.19	*+	0.19	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Anthracene	<0.037	*+	0.037	0.0063	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Di-n-butyl phthalate	<0.19	*+	0.19	0.057	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1
Hexachloroethane	<0.19	*+	0.19	0.057	mg/Kg	☼	08/19/22 08:17	08/22/22 21:07	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-1

Lab Sample ID: 500-220577-3

Date Collected: 08/08/22 10:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Isophorone	<0.19		0.19	0.042	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
N-Nitrosodiphenylamine	<0.19	*+	0.19	0.044	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Phenol	<0.19		0.19	0.084	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	✳	08/19/22 08:17	08/22/22 21:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	124		31 - 143				08/19/22 08:17	08/22/22 21:07	1
2-Fluorobiphenyl	74		43 - 145				08/19/22 08:17	08/22/22 21:07	1
2-Fluorophenol	89		31 - 166				08/19/22 08:17	08/22/22 21:07	1
Nitrobenzene-d5 (Surr)	44		37 - 147				08/19/22 08:17	08/22/22 21:07	1
Phenol-d5	81		30 - 153				08/19/22 08:17	08/22/22 21:07	1
Terphenyl-d14 (Surr)	149		42 - 157				08/19/22 08:17	08/22/22 21:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Arsenic	2.3		0.57	0.19	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Barium	28		0.57	0.064	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Beryllium	0.52		0.23	0.053	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Boron	6.8	B	2.8	0.26	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Cadmium	<0.11		0.11	0.020	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Calcium	81000	B	57	9.6	mg/Kg	✳	08/16/22 09:54	08/18/22 15:56	5
Chromium	11		0.57	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Cobalt	5.5		0.28	0.074	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Copper	12		0.57	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Iron	11000		11	5.9	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Lead	5.1		0.28	0.13	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Magnesium	30000	B	5.7	2.8	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Manganese	210		0.57	0.082	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Nickel	14		0.57	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Potassium	1400		28	10	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Selenium	<0.57		0.57	0.33	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Silver	0.26	J	0.28	0.073	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Sodium	490		57	8.4	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Thallium	<0.57		0.57	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Vanadium	15		0.28	0.067	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1
Zinc	27		1.1	0.50	mg/Kg	✳	08/16/22 09:54	08/17/22 15:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 17:56	1
Chromium	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 17:56	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 17:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/18/22 15:03	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-1

Lab Sample ID: 500-220577-3

Date Collected: 08/08/22 10:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.72		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 17:56	1
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.032	J	0.050	0.010	mg/L		08/16/22 17:20	08/17/22 13:02	1
Barium	0.55		0.50	0.050	mg/L		08/16/22 17:20	08/17/22 13:02	1
Beryllium	0.0070		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 13:02	1
Boron	0.17		0.10	0.050	mg/L		08/16/22 17:20	08/17/22 13:02	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 13:02	1
Calcium	57		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:02	1
Chromium	0.14		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:02	1
Cobalt	0.041		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:02	1
Iron	130		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 13:02	1
Lead	0.046		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 13:02	1
Manganese	0.75		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:02	1
Nickel	0.13	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:02	1
Potassium	35	F1	2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:02	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 13:02	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:02	1
Zinc	0.30	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 13:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 15:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 15:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025	B	0.018	0.0059	mg/Kg	⚠	08/17/22 15:25	08/18/22 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.26		0.26	0.13	mg/Kg	⚠	08/12/22 09:42	08/12/22 18:50	1
pH	8.3		0.2	0.2	SU			08/11/22 20:30	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-2

Lab Sample ID: 500-220577-4

Date Collected: 08/08/22 10:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 99.9

Method: 8260B - Volatile Organic Compounds (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	☼	08/09/22 17:24	08/16/22 20:14	1
1,1,2,2-Tetrachloroethane	<0.0013		0.0013	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
1,1,2-Trichloroethane	<0.0013	*+	0.0013	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
1,1-Dichloroethane	<0.0013		0.0013	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
1,1-Dichloroethene	<0.0013		0.0013	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
1,2-Dichloroethane	<0.0033		0.0033	0.0010	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
1,2-Dichloropropane	<0.0013		0.0013	0.00034	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
1,3-Dichloropropene, Total	<0.0013		0.0013	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
2-Butanone (MEK)	<0.0033		0.0033	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
2-Hexanone	<0.0033		0.0033	0.0010	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
4-Methyl-2-pentanone (MIBK)	<0.0033		0.0033	0.00096	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Acetone	<0.013	*1	0.013	0.0057	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Benzene	<0.0013		0.0013	0.00033	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Bromodichloromethane	<0.0013		0.0013	0.00026	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Bromoform	<0.0013		0.0013	0.00038	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Bromomethane	<0.0033		0.0033	0.0012	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Carbon disulfide	<0.0033		0.0033	0.00068	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Carbon tetrachloride	<0.0013		0.0013	0.00038	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Chlorobenzene	<0.0013		0.0013	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Chloroethane	<0.0033		0.0033	0.00096	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Chloroform	<0.0013		0.0013	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Chloromethane	<0.0033		0.0033	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
cis-1,2-Dichloroethene	<0.0013		0.0013	0.00036	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
cis-1,3-Dichloropropene	<0.0013		0.0013	0.00039	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Dibromochloromethane	<0.0013		0.0013	0.00043	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Ethylbenzene	<0.0013		0.0013	0.00062	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Methyl tert-butyl ether	<0.0013		0.0013	0.00038	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Methylene Chloride	<0.0033		0.0033	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Styrene	<0.0013	*+	0.0013	0.00039	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Tetrachloroethene	<0.0013		0.0013	0.00044	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Toluene	<0.0013		0.0013	0.00033	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
trans-1,2-Dichloroethene	<0.0013		0.0013	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
trans-1,3-Dichloropropene	<0.0013		0.0013	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Trichloroethene	<0.0013		0.0013	0.00044	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Vinyl chloride	<0.0013		0.0013	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1
Xylenes, Total	<0.0026		0.0026	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 134	08/09/22 17:24	08/16/22 20:14	1
4-Bromofluorobenzene (Surr)	96		75 - 131	08/09/22 17:24	08/16/22 20:14	1
Dibromofluoromethane	112		75 - 126	08/09/22 17:24	08/16/22 20:14	1
Toluene-d8 (Surr)	119		75 - 124	08/09/22 17:24	08/16/22 20:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.16		0.16	0.035	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
1,2-Dichlorobenzene	<0.16		0.16	0.039	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
1,3-Dichlorobenzene	<0.16		0.16	0.037	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
1,4-Dichlorobenzene	<0.16		0.16	0.042	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2,2'-oxybis[1-chloropropane]	<0.16		0.16	0.038	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-2

Lab Sample ID: 500-220577-4

Date Collected: 08/08/22 10:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 99.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.33		0.33	0.075	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2,4-Dichlorophenol	<0.33		0.33	0.078	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2,4-Dimethylphenol	<0.33		0.33	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2,4-Dinitrophenol	<0.66		0.66	0.58	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2,4-Dinitrotoluene	<0.16		0.16	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2,6-Dinitrotoluene	<0.16		0.16	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2-Chloronaphthalene	<0.16		0.16	0.036	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2-Chlorophenol	<0.16	+	0.16	0.056	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2-Methylnaphthalene	<0.066		0.066	0.0060	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2-Methylphenol	<0.16		0.16	0.053	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2-Nitroaniline	<0.16		0.16	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
2-Nitrophenol	<0.33		0.33	0.078	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
3 & 4 Methylphenol	<0.16		0.16	0.055	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
3,3'-Dichlorobenzidine	<0.16		0.16	0.046	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
4,6-Dinitro-2-methylphenol	<0.66		0.66	0.26	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
4-Bromophenyl phenyl ether	<0.16		0.16	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
4-Chloroaniline	<0.66		0.66	0.15	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
4-Chlorophenyl phenyl ether	<0.16		0.16	0.038	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
4-Nitrophenol	<0.66		0.66	0.31	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Acenaphthene	<0.033		0.033	0.0059	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Acenaphthylene	<0.033		0.033	0.0043	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Anthracene	<0.033	+	0.033	0.0055	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Benzo[a]anthracene	<0.033		0.033	0.0044	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Benzo[a]pyrene	<0.033		0.033	0.0063	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Benzo[b]fluoranthene	<0.033		0.033	0.0071	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Benzo[k]fluoranthene	<0.033		0.033	0.0097	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Bis(2-chloroethoxy)methane	<0.16		0.16	0.033	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Bis(2-chloroethyl)ether	<0.16		0.16	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Bis(2-ethylhexyl) phthalate	<0.16		0.16	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Butyl benzyl phthalate	<0.16		0.16	0.062	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Carbazole	<0.16		0.16	0.082	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Chrysene	<0.033		0.033	0.0089	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0063	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Dibenzofuran	<0.16		0.16	0.038	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Diethyl phthalate	<0.16		0.16	0.056	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Dimethyl phthalate	<0.16		0.16	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Di-n-butyl phthalate	<0.16	+	0.16	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Di-n-octyl phthalate	<0.16		0.16	0.054	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Fluoranthene	<0.033		0.033	0.0061	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Fluorene	<0.033		0.033	0.0046	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Hexachlorobenzene	<0.066		0.066	0.0076	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Hexachlorobutadiene	<0.16		0.16	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Hexachlorocyclopentadiene	<0.66		0.66	0.19	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1
Hexachloroethane	<0.16	+	0.16	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 21:28	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-2

Lab Sample ID: 500-220577-4

Date Collected: 08/08/22 10:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 99.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0085	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Isophorone	<0.16		0.16	0.037	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Naphthalene	<0.033		0.033	0.0050	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Nitrobenzene	<0.033		0.033	0.0082	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
N-Nitrosodi-n-propylamine	<0.066		0.066	0.040	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
N-Nitrosodiphenylamine	<0.16	*+	0.16	0.039	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Pentachlorophenol	<0.66		0.66	0.53	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Phenol	<0.16		0.16	0.073	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Pyrene	<0.033		0.033	0.0065	mg/Kg	✳	08/19/22 08:17	08/22/22 21:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	125		31 - 143				08/19/22 08:17	08/22/22 21:28	1
2-Fluorobiphenyl	70		43 - 145				08/19/22 08:17	08/22/22 21:28	1
2-Fluorophenol	112		31 - 166				08/19/22 08:17	08/22/22 21:28	1
Nitrobenzene-d5 (Surr)	45		37 - 147				08/19/22 08:17	08/22/22 21:28	1
Phenol-d5	94		30 - 153				08/19/22 08:17	08/22/22 21:28	1
Terphenyl-d14 (Surr)	110		42 - 157				08/19/22 08:17	08/22/22 21:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.95		0.95	0.18	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Arsenic	2.0		0.47	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Barium	25		0.47	0.054	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Beryllium	0.42		0.19	0.044	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Boron	5.6	B	2.4	0.22	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Cadmium	<0.095		0.095	0.017	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Calcium	69000	B	47	8.0	mg/Kg	✳	08/16/22 09:54	08/18/22 15:59	5
Chromium	9.8		0.47	0.23	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Cobalt	4.7		0.24	0.062	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Copper	10		0.47	0.13	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Iron	9200		9.5	4.9	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Lead	4.3		0.24	0.11	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Magnesium	26000	B	4.7	2.4	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Manganese	170		0.47	0.069	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Nickel	12		0.47	0.14	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Potassium	1200		24	8.4	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Selenium	<0.47		0.47	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Silver	0.22	J	0.24	0.061	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Sodium	410		47	7.0	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Thallium	<0.47		0.47	0.24	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Vanadium	13		0.24	0.056	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1
Zinc	26		0.95	0.42	mg/Kg	✳	08/16/22 09:54	08/17/22 15:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 18:12	1
Chromium	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:12	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 18:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/18/22 15:06	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B02-2

Lab Sample ID: 500-220577-4

Date Collected: 08/08/22 10:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 99.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.69		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:12	1
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:12	1

Method: 6010B - 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		08/16/22 17:20	08/17/22 13:21	1
Barium	0.61		0.50	0.050	mg/L		08/16/22 17:20	08/17/22 13:21	1
Beryllium	0.0077		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 13:21	1
Boron	0.21		0.10	0.050	mg/L		08/16/22 17:20	08/17/22 13:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 13:21	1
Calcium	71		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:21	1
Chromium	0.16		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:21	1
Cobalt	0.042		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:21	1
Iron	140		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 13:21	1
Lead	0.050		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 13:21	1
Manganese	0.81		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:21	1
Nickel	0.14	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:21	1
Potassium	38		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:21	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 13:21	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:21	1
Zinc	0.33	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 13:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 15:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 15:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.016	0.0054	mg/Kg	☆	08/17/22 15:25	08/18/22 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.22		0.22	0.11	mg/Kg	☆	08/12/22 09:42	08/12/22 18:51	1
pH	8.6		0.2	0.2	SU			08/11/22 20:32	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-1

Lab Sample ID: 500-220577-5

Date Collected: 08/08/22 10:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
1,1,2-Trichloroethane	<0.0016	*+	0.0016	0.00070	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Acetone	<0.016	*1	0.016	0.0071	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Styrene	<0.0016	*+	0.0016	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 134	08/09/22 17:24	08/16/22 20:38	1
4-Bromofluorobenzene (Surr)	102		75 - 131	08/09/22 17:24	08/16/22 20:38	1
Dibromofluoromethane	109		75 - 126	08/09/22 17:24	08/16/22 20:38	1
Toluene-d8 (Surr)	119		75 - 124	08/09/22 17:24	08/16/22 20:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-1

Lab Sample ID: 500-220577-5

Date Collected: 08/08/22 10:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2-Chlorophenol	<0.19	+	0.19	0.066	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Anthracene	<0.038	+	0.038	0.0064	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Di-n-butyl phthalate	<0.19	+	0.19	0.059	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1
Hexachloroethane	<0.19	+	0.19	0.059	mg/Kg	☼	08/19/22 08:17	08/22/22 21:50	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-1

Lab Sample ID: 500-220577-5

Date Collected: 08/08/22 10:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
N-Nitrosodiphenylamine	<0.19	*+	0.19	0.046	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Phenol	<0.19		0.19	0.086	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	✳	08/19/22 08:17	08/22/22 21:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	134		31 - 143				08/19/22 08:17	08/22/22 21:50	1
2-Fluorobiphenyl	99		43 - 145				08/19/22 08:17	08/22/22 21:50	1
2-Fluorophenol	112		31 - 166				08/19/22 08:17	08/22/22 21:50	1
Nitrobenzene-d5 (Surr)	62		37 - 147				08/19/22 08:17	08/22/22 21:50	1
Phenol-d5	131		30 - 153				08/19/22 08:17	08/22/22 21:50	1
Terphenyl-d14 (Surr)	178	S1+	42 - 157				08/19/22 08:17	08/22/22 21:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.1	0.22	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Arsenic	4.6		0.56	0.19	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Barium	59		0.56	0.064	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Beryllium	0.54		0.22	0.052	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Boron	2.9	B	2.8	0.26	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Cadmium	<0.11		0.11	0.020	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Calcium	8100	B	11	1.9	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Chromium	13		0.56	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Cobalt	12		0.28	0.074	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Copper	14		0.56	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Iron	15000		11	5.8	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Lead	11		0.28	0.13	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Magnesium	5900	B	5.6	2.8	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Manganese	620		0.56	0.081	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Nickel	21		0.56	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Potassium	1000		28	9.9	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Selenium	<0.56		0.56	0.33	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Silver	0.27	J	0.28	0.072	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Sodium	240		56	8.3	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Thallium	<0.56		0.56	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Vanadium	20		0.28	0.066	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1
Zinc	46		1.1	0.49	mg/Kg	✳	08/16/22 09:54	08/17/22 15:36	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 18:16	1
Chromium	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:16	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 18:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/17/22 18:16	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-1

Lab Sample ID: 500-220577-5

Date Collected: 08/08/22 10:30

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.25		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:16	1
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.052		0.050	0.010	mg/L		08/16/22 17:20	08/17/22 13:24	1
Barium	0.52		0.50	0.050	mg/L		08/16/22 17:20	08/17/22 13:24	1
Beryllium	0.0070		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 13:24	1
Boron	0.15		0.10	0.050	mg/L		08/16/22 17:20	08/17/22 13:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 13:24	1
Calcium	20		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:24	1
Chromium	0.16		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:24	1
Cobalt	0.040		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:24	1
Iron	150		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 13:24	1
Lead	0.055		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 13:24	1
Manganese	1.0		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:24	1
Nickel	0.16	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:24	1
Potassium	30		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:24	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 13:24	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:24	1
Zinc	0.37	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 13:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020	^+	0.0020	0.0020	mg/L		08/16/22 17:19	08/19/22 00:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 15:11	1
Thallium	0.0024		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039	B	0.018	0.0059	mg/Kg	☆	08/17/22 15:25	08/18/22 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.16	J	0.28	0.14	mg/Kg	☆	08/12/22 09:42	08/12/22 18:53	1
pH	7.9		0.2	0.2	SU			08/11/22 20:35	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-2

Lab Sample ID: 500-220577-6

Date Collected: 08/08/22 10:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
1,1,2-Trichloroethane	<0.0016	*+	0.0016	0.00070	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Acetone	<0.016	*1	0.016	0.0071	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Styrene	<0.0016	*+	0.0016	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 134	08/09/22 17:24	08/16/22 21:02	1
4-Bromofluorobenzene (Surr)	100		75 - 131	08/09/22 17:24	08/16/22 21:02	1
Dibromofluoromethane	112		75 - 126	08/09/22 17:24	08/16/22 21:02	1
Toluene-d8 (Surr)	118		75 - 124	08/09/22 17:24	08/16/22 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-2

Lab Sample ID: 500-220577-6

Date Collected: 08/08/22 10:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2-Chlorophenol	<0.19	+	0.19	0.066	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Anthracene	<0.038	+	0.038	0.0064	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Di-n-butyl phthalate	<0.19	+	0.19	0.058	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1
Hexachloroethane	<0.19	+	0.19	0.058	mg/Kg	☼	08/19/22 08:17	08/22/22 22:11	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-2

Lab Sample ID: 500-220577-6

Date Collected: 08/08/22 10:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
N-Nitrosodiphenylamine	<0.19	+	0.19	0.045	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Phenol	<0.19		0.19	0.085	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	✳	08/19/22 08:17	08/22/22 22:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		31 - 143				08/19/22 08:17	08/22/22 22:11	1
2-Fluorobiphenyl	70		43 - 145				08/19/22 08:17	08/22/22 22:11	1
2-Fluorophenol	104		31 - 166				08/19/22 08:17	08/22/22 22:11	1
Nitrobenzene-d5 (Surr)	55		37 - 147				08/19/22 08:17	08/22/22 22:11	1
Phenol-d5	85		30 - 153				08/19/22 08:17	08/22/22 22:11	1
Terphenyl-d14 (Surr)	112		42 - 157				08/19/22 08:17	08/22/22 22:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Arsenic	5.6		0.58	0.20	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Barium	53		0.58	0.066	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Beryllium	0.67		0.23	0.054	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Boron	2.0	J B	2.9	0.27	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Cadmium	<0.12		0.12	0.021	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Calcium	1700	B	12	1.9	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Chromium	15		0.58	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Cobalt	10		0.29	0.075	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Copper	14		0.58	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Iron	17000		12	6.0	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Lead	11		0.29	0.13	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Magnesium	2700	B	5.8	2.9	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Manganese	390		0.58	0.083	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Nickel	22		0.58	0.17	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Potassium	1000		29	10	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Selenium	<0.58		0.58	0.34	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Silver	0.44		0.29	0.074	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Sodium	540		58	8.5	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Thallium	<0.58		0.58	0.29	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Vanadium	21		0.29	0.068	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1
Zinc	53		1.2	0.50	mg/Kg	✳	08/16/22 09:54	08/17/22 15:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 18:20	1
Chromium	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:20	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 18:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/17/22 18:20	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B03-2

Lab Sample ID: 500-220577-6

Date Collected: 08/08/22 10:40

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.021	J	0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:20	1
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.067		0.050	0.010	mg/L		08/16/22 17:20	08/17/22 13:27	1
Barium	0.75		0.50	0.050	mg/L		08/16/22 17:20	08/17/22 13:27	1
Beryllium	0.0095		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 13:27	1
Boron	0.054	J	0.10	0.050	mg/L		08/16/22 17:20	08/17/22 13:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 13:27	1
Calcium	23		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:27	1
Chromium	0.18		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:27	1
Cobalt	0.066		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:27	1
Iron	210		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 13:27	1
Lead	0.11		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 13:27	1
Manganese	2.4		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:27	1
Nickel	0.24	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:27	1
Potassium	22		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:27	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 13:27	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:27	1
Zinc	0.68		0.50	0.020	mg/L		08/16/22 17:20	08/17/22 13:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020	^+	0.0020	0.0020	mg/L		08/16/22 17:19	08/19/22 00:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 15:17	1
Thallium	0.0025		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 15:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043	B	0.017	0.0057	mg/Kg	☆	08/17/22 15:25	08/18/22 13:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.25		0.25	0.13	mg/Kg	☆	08/12/22 09:42	08/12/22 18:55	1
pH	8.0		0.2	0.2	SU			08/11/22 20:37	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-1

Lab Sample ID: 500-220577-9

Date Collected: 08/08/22 12:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
1,1,2-Trichloroethane	<0.0018	*+	0.0018	0.00077	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Acetone	<0.018	*1	0.018	0.0078	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Styrene	<0.0018	*+	0.0018	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	08/09/22 17:24	08/16/22 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	08/09/22 17:24	08/16/22 22:15	1
4-Bromofluorobenzene (Surr)	102		75 - 131	08/09/22 17:24	08/16/22 22:15	1
Dibromofluoromethane	110		75 - 126	08/09/22 17:24	08/16/22 22:15	1
Toluene-d8 (Surr)	113		75 - 124	08/09/22 17:24	08/16/22 22:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-1

Lab Sample ID: 500-220577-9

Date Collected: 08/08/22 12:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2,4-Dichlorophenol	<0.40		0.40	0.094	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2-Chlorophenol	<0.20	+	0.20	0.068	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Acenaphthene	<0.040		0.040	0.0071	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Anthracene	<0.040	+	0.040	0.0066	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Di-n-butyl phthalate	<0.20	+	0.20	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Hexachloroethane	<0.20	+	0.20	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-1

Lab Sample ID: 500-220577-9

Date Collected: 08/08/22 12:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
N-Nitrosodiphenylamine	<0.20	+	0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Phenanthrene	<0.040		0.040	0.0055	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	08/19/22 08:17	08/22/22 23:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	112		31 - 143	08/19/22 08:17	08/22/22 23:14	1
2-Fluorobiphenyl	64		43 - 145	08/19/22 08:17	08/22/22 23:14	1
2-Fluorophenol	82		31 - 166	08/19/22 08:17	08/22/22 23:14	1
Nitrobenzene-d5 (Surr)	55		37 - 147	08/19/22 08:17	08/22/22 23:14	1
Phenol-d5	85		30 - 153	08/19/22 08:17	08/22/22 23:14	1
Terphenyl-d14 (Surr)	110		42 - 157	08/19/22 08:17	08/22/22 23:14	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Arsenic	5.4		0.58	0.20	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Barium	52		0.58	0.066	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Beryllium	0.61		0.23	0.054	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Boron	3.5	B	2.9	0.27	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Cadmium	0.034	J B	0.12	0.021	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Calcium	19000	B	12	2.0	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Chromium	14		0.58	0.29	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Cobalt	11		0.29	0.076	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Copper	18		0.58	0.16	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Iron	16000		12	6.0	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Lead	14		0.29	0.13	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Magnesium	13000	B	5.8	2.9	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Manganese	440		0.58	0.084	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Nickel	22		0.58	0.17	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Potassium	1300		29	10	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Silver	0.30		0.29	0.075	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Sodium	140		58	8.5	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Vanadium	20		0.29	0.068	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1
Zinc	49		1.2	0.51	mg/Kg	☼	08/16/22 09:54	08/17/22 15:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/16/22 17:19	08/17/22 18:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 18:32	1
Chromium	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:32	1
Iron	1.7		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 18:32	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-1

Lab Sample ID: 500-220577-9

Date Collected: 08/08/22 12:00

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/17/22 18:32	1
Manganese	0.35		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:32	1
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.058		0.050	0.010	mg/L		08/16/22 17:20	08/17/22 13:37	1
Barium	0.60		0.50	0.050	mg/L		08/16/22 17:20	08/17/22 13:37	1
Beryllium	0.0086		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 13:37	1
Boron	0.15		0.10	0.050	mg/L		08/16/22 17:20	08/17/22 13:37	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 13:37	1
Calcium	26		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:37	1
Chromium	0.18		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:37	1
Cobalt	0.047		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:37	1
Iron	180		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 13:37	1
Lead	0.072		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 13:37	1
Manganese	1.3		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:37	1
Nickel	0.20	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:37	1
Potassium	34		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:37	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 13:37	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:37	1
Zinc	0.44	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 13:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020	^+	0.0020	0.0020	mg/L		08/16/22 17:19	08/19/22 00:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 15:23	1
Thallium	0.0029		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 15:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041	B	0.018	0.0060	mg/Kg	☼	08/17/22 15:25	08/18/22 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.27		0.27	0.13	mg/Kg	☼	08/16/22 10:16	08/16/22 20:50	1
pH	7.7		0.2	0.2	SU			08/11/22 20:45	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2

Lab Sample ID: 500-220577-10

Date Collected: 08/08/22 12:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
1,1,2-Trichloroethane	<0.0018	*+	0.0018	0.00077	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Acetone	<0.018	*1	0.018	0.0078	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Styrene	<0.0018	*+	0.0018	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 134	08/09/22 17:24	08/16/22 22:40	1
4-Bromofluorobenzene (Surr)	100		75 - 131	08/09/22 17:24	08/16/22 22:40	1
Dibromofluoromethane	114		75 - 126	08/09/22 17:24	08/16/22 22:40	1
Toluene-d8 (Surr)	117		75 - 124	08/09/22 17:24	08/16/22 22:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2

Lab Sample ID: 500-220577-10

Date Collected: 08/08/22 12:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2-Chlorophenol	<0.20	+	0.20	0.069	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Anthracene	<0.040	+	0.040	0.0067	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Di-n-butyl phthalate	<0.20	+	0.20	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1
Hexachloroethane	<0.20	+	0.20	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 23:36	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2

Lab Sample ID: 500-220577-10

Date Collected: 08/08/22 12:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Isophorone	<0.20		0.20	0.045	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
N-Nitrosodiphenylamine	<0.20	*+	0.20	0.048	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Phenol	<0.20		0.20	0.089	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	✳	08/19/22 08:17	08/22/22 23:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	96		31 - 143				08/19/22 08:17	08/22/22 23:36	1
2-Fluorobiphenyl	60		43 - 145				08/19/22 08:17	08/22/22 23:36	1
2-Fluorophenol	71		31 - 166				08/19/22 08:17	08/22/22 23:36	1
Nitrobenzene-d5 (Surr)	46		37 - 147				08/19/22 08:17	08/22/22 23:36	1
Phenol-d5	32		30 - 153				08/19/22 08:17	08/22/22 23:36	1
Terphenyl-d14 (Surr)	92		42 - 157				08/19/22 08:17	08/22/22 23:36	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	1.1	0.22	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Arsenic	5.8		0.57	0.19	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Barium	52		0.57	0.065	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Beryllium	0.70		0.23	0.053	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Boron	3.2	B	2.8	0.26	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Cadmium	<0.11		0.11	0.020	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Calcium	12000	B	11	1.9	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Chromium	16		0.57	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Cobalt	13		0.28	0.074	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Copper	19		0.57	0.16	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Iron	19000		11	5.9	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Lead	14		0.28	0.13	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Magnesium	9100	B	5.7	2.8	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Manganese	400		0.57	0.082	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Nickel	26		0.57	0.17	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Potassium	1400		28	10	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Selenium	<0.57		0.57	0.33	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Silver	0.35		0.28	0.073	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Sodium	140		57	8.4	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Thallium	<0.57		0.57	0.28	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Vanadium	23		0.28	0.067	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1
Zinc	50		1.1	0.50	mg/Kg	✳	08/16/22 09:54	08/17/22 16:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 18:36	1
Chromium	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:36	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 18:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/17/22 18:36	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2

Lab Sample ID: 500-220577-10

Date Collected: 08/08/22 12:10

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.29		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:36	1
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.041	J	0.050	0.010	mg/L		08/16/22 17:20	08/17/22 13:40	1
Barium	0.51		0.50	0.050	mg/L		08/16/22 17:20	08/17/22 13:40	1
Beryllium	0.0061		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 13:40	1
Boron	0.12		0.10	0.050	mg/L		08/16/22 17:20	08/17/22 13:40	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 13:40	1
Calcium	20		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:40	1
Chromium	0.13		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:40	1
Cobalt	0.036		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:40	1
Iron	130		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 13:40	1
Lead	0.049		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 13:40	1
Manganese	1.1		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:40	1
Nickel	0.14	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:40	1
Potassium	26		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:40	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 13:40	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:40	1
Zinc	0.32	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 13:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020	^+	0.0020	0.0020	mg/L		08/16/22 17:19	08/19/22 01:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 15:25	1
Thallium	0.0023		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 15:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038	B	0.018	0.0061	mg/Kg	☆	08/17/22 15:25	08/18/22 12:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.29		0.29	0.14	mg/Kg	☆	08/16/22 10:16	08/16/22 20:51	1
pH	7.3		0.2	0.2	SU			08/11/22 20:49	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2 Dup

Lab Sample ID: 500-220577-11

Date Collected: 08/08/22 12:20

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
1,1,2-Trichloroethane	<0.0018	*+	0.0018	0.00077	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Acetone	<0.018	*1	0.018	0.0078	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Styrene	<0.0018	*+	0.0018	0.00054	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	08/09/22 17:24	08/16/22 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	08/09/22 17:24	08/16/22 23:04	1
4-Bromofluorobenzene (Surr)	99		75 - 131	08/09/22 17:24	08/16/22 23:04	1
Dibromofluoromethane	111		75 - 126	08/09/22 17:24	08/16/22 23:04	1
Toluene-d8 (Surr)	118		75 - 124	08/09/22 17:24	08/16/22 23:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2 Dup

Lab Sample ID: 500-220577-11

Date Collected: 08/08/22 12:20

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2-Chlorophenol	<0.20	+	0.20	0.069	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Anthracene	<0.040	+	0.040	0.0067	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Di-n-butyl phthalate	<0.20	+	0.20	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Hexachlorobenzene	<0.081		0.081	0.0094	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Hexachloroethane	<0.20	+	0.20	0.061	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2 Dup

Lab Sample ID: 500-220577-11

Date Collected: 08/08/22 12:20

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
N-Nitrosodiphenylamine	<0.20	+	0.20	0.048	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	08/19/22 08:17	08/22/22 23:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	108		31 - 143				08/19/22 08:17	08/22/22 23:57	1
2-Fluorobiphenyl	69		43 - 145				08/19/22 08:17	08/22/22 23:57	1
2-Fluorophenol	84		31 - 166				08/19/22 08:17	08/22/22 23:57	1
Nitrobenzene-d5 (Surr)	53		37 - 147				08/19/22 08:17	08/22/22 23:57	1
Phenol-d5	86		30 - 153				08/19/22 08:17	08/22/22 23:57	1
Terphenyl-d14 (Surr)	139		42 - 157				08/19/22 08:17	08/22/22 23:57	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Arsenic	5.0		0.58	0.20	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Barium	56		0.58	0.066	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Beryllium	0.63		0.23	0.054	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Boron	4.6	B	2.9	0.27	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Calcium	22000	B	12	2.0	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Chromium	14		0.58	0.29	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Cobalt	10		0.29	0.076	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Copper	16		0.58	0.16	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Iron	16000		12	6.0	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Lead	12		0.29	0.13	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Magnesium	14000	B	5.8	2.9	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Manganese	410		0.58	0.084	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Nickel	23		0.58	0.17	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Potassium	1300		29	10	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Silver	0.28	J	0.29	0.075	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Sodium	150		58	8.6	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Vanadium	19		0.29	0.068	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1
Zinc	50		1.2	0.51	mg/Kg	☼	08/16/22 09:54	08/17/22 16:04	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		08/16/22 17:19	08/17/22 18:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		08/16/22 17:19	08/17/22 18:40	1
Chromium	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:40	1
Iron	<0.40		0.40	0.20	mg/L		08/16/22 17:19	08/17/22 18:40	1

Eurofins Chicago

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Client Sample ID: 3331V-4-B05-2 Dup

Lab Sample ID: 500-220577-11

Date Collected: 08/08/22 12:20

Matrix: Solid

Date Received: 08/09/22 13:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		08/16/22 17:19	08/17/22 18:40	1
Manganese	0.22		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:40	1
Nickel	<0.025		0.025	0.010	mg/L		08/16/22 17:19	08/17/22 18:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.054		0.050	0.010	mg/L		08/16/22 17:20	08/17/22 13:43	1
Barium	0.56		0.50	0.050	mg/L		08/16/22 17:20	08/17/22 13:43	1
Beryllium	0.0074		0.0040	0.0040	mg/L		08/16/22 17:20	08/17/22 13:43	1
Boron	0.095	J	0.10	0.050	mg/L		08/16/22 17:20	08/17/22 13:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		08/16/22 17:20	08/17/22 13:43	1
Calcium	21		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:43	1
Chromium	0.17		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:43	1
Cobalt	0.044		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:43	1
Iron	170		0.40	0.20	mg/L		08/16/22 17:20	08/17/22 13:43	1
Lead	0.072		0.0075	0.0075	mg/L		08/16/22 17:20	08/17/22 13:43	1
Manganese	1.4		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:43	1
Nickel	0.19	B	0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:43	1
Potassium	25		2.5	0.50	mg/L		08/16/22 17:20	08/17/22 13:43	1
Selenium	<0.050		0.050	0.020	mg/L		08/16/22 17:20	08/17/22 13:43	1
Silver	<0.025		0.025	0.010	mg/L		08/16/22 17:20	08/17/22 13:43	1
Zinc	0.40	J	0.50	0.020	mg/L		08/16/22 17:20	08/17/22 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020	F1	0.0020	0.0020	mg/L		08/16/22 17:19	08/19/22 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		08/16/22 17:20	08/17/22 15:27	1
Thallium	0.0024		0.0020	0.0020	mg/L		08/16/22 17:20	08/17/22 15:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		08/17/22 10:25	08/18/22 10:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049	B	0.019	0.0063	mg/Kg	⊛	08/17/22 15:25	08/18/22 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.28		0.28	0.14	mg/Kg	⊛	08/16/22 10:16	08/16/22 20:57	1
pH	7.5		0.2	0.2	SU			08/11/22 20:52	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) 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.
E	Result exceeded calibration range.
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.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

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Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE8-001

Job ID: 500-220577-1

Laboratory: Eurofins Chicago

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

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

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CHAIN OF CUSTODY RECORD

Client Contact Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	 500-220577 COC	laboratory ab Test America - Chicago <i>Euro fms</i> Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com	Project Name <u>AE8-001A</u> Project No <u>PTB/WO#: 195-002/001A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <i>[Signature]</i>	COC No <u>1</u> of <u>1</u> Lab Job No <u>500-220577</u> Sample Temp <u>28 → 20.2 / 20.1</u>
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Special Instructions:
 See Table 2 for complete parameter lists and minimum reporting limits
 * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal
 ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter
 *** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

					ANALYSES													
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		
1	3331V-4-B01-1	8/9/22	9:30	S	X	X					X	X	X	X	X			
2	3331V-4-B01-2		9:40															
3	3331V-4-B02-1		10:00															
4	3331V-4-B02-2		10:10															
5	3331V-4-B03-1		10:30															
6	3331V-4-B03-2		10:40															
7	3331V-4-B04-1		11:00															
8	3331V-4-B04-2		11:10															
9	3331V-4-B05-1		12:00															
10	3331V-4-B05-2		12:10															
11	3331V-4-B05-2 dup		12:20															
12	Trap Blank #1				X													

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

Relinquished by <i>[Signature]</i>	Date/Time <u>8/9/22</u>	Received by <i>[Signature]</i> EETA 5/9/22 1000	Date/Time <u>8/9/22</u>
Relinquished by <i>[Signature]</i> EETA	Date/Time <u>8/9/22 1330</u>	Received by <i>[Signature]</i>	Date/Time <u>8/9/22 1330</u>
Relinquished by	Date/Time	Received by	Date/Time